

C I T Y   O F   L E E D S

R E P O R T

ON THE

Health & Sanitary  
Administration

OF THE CITY

FOR THE YEAR 1936

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## PUBLIC HEALTH COMMITTEE.

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*Chairman* : Alderman SIR GEORGE MARTIN.

Alderman A. E. WEAVER.	Councillor H. M. G. McKAY.
„ ELIZABETH BOOTH.	„ WINIFRED SHUTT.
Councillor GERTRUDE A. STEVENSON	„ GERTRUDE WARDLE.
„ G. BRETT.	„ Z. P. FERNANDEZ.
„ D. BEEVERS.	„ J. WILKINSON.
„ (Deputy-Chairman).	„ J. W. WOOTTON.
„ J. W. HEMINGWAY.	„ J. W. BOOTH.
„ LIZZIE NAYLOR.	„ BEATRICE C. IVES.

## SUB-COMMITTEES.

### MATERNITY AND CHILD WELFARE.

*Chairman* : Alderman A. E. WEAVER.

Alderman SIR GEORGE MARTIN.	Councillor BEATRICE C. IVES.
Councillor GERTRUDE A. STEVENSON	„ J. W. BOOTH.
„ GERTRUDE WARDLE.	„ Z. P. FERNANDEZ.
„ LIZZIE NAYLOR.	„ G. BRETT.
„ D. BEEVERS.	

### CO-OPTED MEMBERS.

Mrs. R. H. BLACKBURN.	Mrs. AUSTYN BARRAN.
Mrs. D. BEEVERS.	Mrs. E. A. SMITH.

### CO-OPTED MEMBERS FOR INFANTS' HOSPITAL, WYTHIER.

Mrs. B. M. DAVID.	Mrs. T. L. E. SPILMONT.
Dr. CLARA STEWART.	

## TUBERCULOSIS.

*Chairman* : Councillor D. BEEVERS.

Alderman Sir GEORGE MARTIN.	Councillor Z. P. FERNANDEZ.
„ ELIZABETH BOOTH.	„ J. W. WOOTTON.
Councillor J. W. BOOTH.	„ WINIFRED SHUTT.
„ GERTRUDE WARDLE.	„ G. BRETT.
„ J. W. HEMINGWAY.	„ H. M. G. McKAY.

## HOSPITALS.

*Chairman :* Alderman ELIZABETH BOOTH.

Alderman SIR GEORGE MARTIN.  
 Councillor D. BEEVERS.  
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 „ J. W. HEMINGWAY.  
 „ BEATRICE C. IVES.

Councillor LIZZIE NAYLOR.  
 „ GERTRUDE WARDLE.  
 „ J. WILKINSON.  
 „ J. W. WOOTTON.  
 „ H. M. G. MCKAY.

## JOINT DAY NURSERIES.

*Chairman :* Alderman A. E. WEAVER.*Representing Maternity and  
Child Welfare Committee.*

Councillor GERTRUDE WARDLE.  
 Mrs. D. BEEVERS.

*Representing Education  
Committee.*

Mrs. S. MURPHY.

*Representing Leeds Day Nurseries Association :*

Councillor GERTRUDE HALBOT, J.P. | Councillor BEATRICE C. IVES.

## CATTLE DISEASES, MILK AND MEAT.

*Chairman :* Councillor BEATRICE C. IVES.

Alderman SIR GEORGE MARTIN.  
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 „ J. WILKINSON.  
 „ H. M. G. MCKAY.

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 „ G. BRETT.  
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Alderman A. E. WEAVER.  
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 Councillor D. BEEVERS.  
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 „ BEATRICE C. IVES.

Councillor J. WILKINSON.  
 „ J. W. BOOTH.  
 „ Z. P. FERNANDEZ.  
 „ J. W. HEMINGWAY.  
 „ J. W. WOOTTON

## PUBLIC HEALTH STAFF.

Medical Officer of Health and Chief Tuberculosis Officer	J. JOHNSTONE JERVIS, M.D., Ch.B. D.P.H.
Deputy Medical Officer of Health ..	J. SHARPE, M.B., F.R.F.P.S., D.P.H.
Assistant Medical Officer of Health for Maternity and Child Welfare and Medical Officer of Infants' Hospital	GLADYS J. C. RUSSELL, M.B., Ch.B., D.P.H.
Assistant Medical Officers for Maternity and Child Welfare	SARAH N. S. BARKER, M.B., Ch.B., L.R.C.P., M.R.C.S. MARIA L. GAUNT, M.B., Ch.B. ANNE M. FORREST, M.B., Ch.B., D.P.H. MARION KNOWLES, M.B., Ch.B. MARGARET S. M. REID, M.D., D.P.H.
Chief Clinical Tuberculosis Officer ..	N. TATTERSALL, M.D., B.S.
Assistant Clinical Tuberculosis Officer	A. G. EVANS, M.R.C.S., L.R.C.P.
Assistant Clinical Tuberculosis Officer	S. THOMPSON, M.B., Ch.B., L.M.S.S.A.
Dental Officer for Maternity and Child Welfare and Tuberculosis	W. L. FLEMING, L.D.S.
Municipal Hospitals—	
Medical Superintendent ..	J. DICK, M.B., Ch.B., D.P.H.
St. James's Hospital—	
Deputy Medical Superintendent	W. MCINTOSH, M.B., Ch.B.
St. Mary's Infirmary—	
Resident Medical Officer ..	F. H. B. FULLER, M.B., Ch.B.
St. George's Infirmary—	
Visiting Medical Officer ..	M. MELVIN, M.D., Ch.B.
Medical Superintendents—	
Infectious Disease Hospital ..	E. C. BENN, M.B., Ch.B., D.P.H. (Seacroft).
Killingbeck Sanatorium ..	W. S. GILMOUR, M.B., Ch.B.
Gateforth Sanatorium—	
Resident Medical Officer ..	A. C. MEEK, M.A., M.B., Ch.B., D.P.H.
Venereal Diseases Officer ..	J. P. BIBBY, M.B., Ch.B., M.R.C.P.
Assistant Medical Officer for Venereal Disease .. .. .	M. STODDART-SCOTT, M.D., Ch.B.
Do. .. do. ..	DOROTHY PRIESTLEY, M.D., B.S.
City Bacteriologist .. ..	J. W. McLEOD, F.R.S., M.B., Ch.B.

Public Vaccinators and District Medical Officers	..	..	..	E. S. G. FOWLER, M.R.C.S., L.R.C.P.
Do. do.	..	..	..	A. A. ROBERTS, M.B., Ch.B.
Do. do.	..	..	..	N. F. WINDER, M.B., Ch.B.
Do. do.	..	..	..	H. B. POPE, M.A., M.R.C.S., L.R.C.P.
Do. do.	..	..	..	J. E. MIDDLEMISS, F.R.F.P.S., M.R.C.S.
Do. do.	..	..	..	J. CARDIS, M.D.
Do. do.	..	..	..	C. P. KELLY Jun., M.B., Ch.B., B.A.O.
Do. do.	..	..	..	J. J. REYNOLDS, M.B., Ch.B.
Do. do.	..	..	..	W. H. BEAN, M.B., Ch.B.
Do. do.	..	..	..	J. E. RUSBY, L.M.S.S.A.
Do. do.	..	..	..	J. H. WAY, M.R.C.S., L.R.C.P.
Do. do.	..	..	..	W. MURISON SMITH, M.B., Ch.B.
Do. do.	..	..	..	T. D. PRATT, M.B., Ch.B., M.R.C.S., L.R.C.P.
Do. do.	..	..	..	W. G. PLATT, M.B., Ch.B., M.R.C.S., L.R.C.P.
Do. do.	..	..	..	J. H. E. MOORE, M.A., M.B., Ch.B.
Do. do.	..	..	..	F. DANKS, M.B., Ch.B.
Do. do.	..	..	..	H. F. HOLLIS, M.B., Ch.B.
Do. do.	..	..	..	J. A. YOUNG, M.R.C.S., L.R.C.P.
Do. do.	..	..	..	J. P. G. DALY, M.B., Ch.B., B.A.O.
Public Vaccinators	..	..	..	M. SHERWIN, M.B., Ch.B.
Do. do.	..	..	..	W. PEARCE, M.R.C.S., L.R.C.P.
Do. do.	..	..	..	J. DICK, M.B., Ch.B., D.P.H.
Do. do.	..	..	..	M. MELVIN, M.B., Ch.B.
District Medical Officers	..	..	..	R. H. OLVER, M.B., Ch.B.
Do. do.	..	..	..	L. BRILL, M.B., Ch.B., F.R.C.S.
Do. do.	..	..	..	M. J. COOKE, M.B., Ch.B., B.A.O.
Do. do.	..	..	..	J. PHILLIPS, M.D.,
Chief Veterinary Officer	..	..	..	J. A. DIXON, M.R.C.V.S.
Assistant Veterinary Officer	..	..	..	E. F. MCCLEERY, M.R.C.V.S., D.V.S.M.
City Analyst	..	..	..	C. H. MANLEY, M.A., F.I.C.
Assistant City Analyst	..	..	..	A. HOULBROOKE, M.Sc., F.I.C.
Chief Sanitary Inspector	..	..	..	E. STANDISH, M.R.San. I.
Divisional Sanitary Inspector	..	..	..	G. F. MARSHALL.
Do. do.	..	..	..	J. RICHARDSON.
Removal Officer	..	..	..	D. FERGUSON.

## Chief Health Visitor and Inspector of

Midwives .. .. MARY E. HUGHES.

## Principal Clerks—

Finance .. .. A. R. BEST.

Statistics .. .. J. P. MOIR.

Sanitary .. .. A. SPARKS.

Infectious Diseases .. .. H. O. PEAKE.

Secretarial .. .. P. A. WOODCOCK.

Food and Drugs .. .. C. STEAD.

Health Clinic .. .. F. H. WOOD.

Hospitals .. .. J. FOLKARD.

## Special Inspectors including Smoke, Lodging-houses, Food and Drugs,

Dairies, Meat, Workshops and Diseases of Animals .. .. 15

Laboratory Assistant .. .. 1

Sanitary Inspectors .. .. 20

Vaccination Officers (4 part-time) .. .. 6

Female Sanitary Inspectors .. .. 2

Health Visitors .. .. 35

Sunlight, Orthopædic and Dental Nurses .. .. 1

Chief Health Visitor and Inspector of Midwives .. .. 1

Tuberculosis Nurses .. .. 11

Dispensers .. .. 7

Masseuses .. .. 4

Clerical Staff and Almoners .. .. 52

Ambulance and Disinfecting Staff .. .. 22

Flushing Staff .. .. 5

Disinfection .. .. 26

## St. James's Hospital (9 Consulting Surgeons, 7 Consulting Physicians,

1 Consulting Pathologist, 4 Visiting Anæsthetists, 1 Pathologist, 1

Radiologist, 1 Resident Surgical Officer, 1 Resident Medical Officer,

4 House Physicians, 3 House Surgeons, 1 Chaplain, 3 Religious

Instructors, 1 Dentist (part time), 1 Matron, 2 Assistant Matrons,

1 Home Sister, 1 Sister Tutor, 1 Housekeeper Sister, 3 Masseuses,

1 Masseur, 2 Dispensers, 3 Lady Almoners, 1 X-Ray Sister, 1

Radiographer, 26 Nursing Sisters, 4 Staff Nurses, 34 Staff Nurses

and Pupil Midwives, 165 Probationer Nurses, 2 Resident Nurse

Attendants (Female), 22 Non-resident Nurse Attendants (Female),

1 Male Charge Attendant, 16 non-resident Nurse Attendants (Male),

2 Charge Attendants (Mental Wards), 16 Mental Ward Attendants

(Female), 16 Mental Ward Attendants (Male), 1 Cook, 1 Assistant

Cook, 24 Maids, 1 Steward, 1 Assistant Steward, 10 Clerks, 3 Office

Attendants, 5 Laboratory Assistants, 24 Male Servants (Porters,

etc.), 1 Children's Attendant, 12 Female Servants (Sewing Room),

66 Cleaners) .. .. 507

St. Mary's Infirmary (1 Resident Medical Officer, 3 Religious Instructors, 1 Matron, 1 Assistant Matron, 1 Home Sister and Sister Tutor, 7 Nursing Sisters, 1 Staff Nurse, 5 Staff Nurses and Pupil Midwives, 2 Pupil Midwives, 31 Probationer Nurses, 1 Female Cook, 1 Male Cook, 1 Female Assistant Cook, 4 Maids, 1 Steward, 2 Clerks, 1 Engineer, 3 Stokers, 13 Male Servants (Porters, etc.), 2 Seamstresses, 1 Head Laundress, 14 Female Laundry Hands, 2 Male Laundry Hands, 20 Cleaners)	.. .. .	119
St. George's Infirmary (1 Part-time Medical Officer, 1 Matron, 1 Assistant Matron, 4 Nursing Sisters, 17 Resident Nurse Attendants (Female), 34 Non-resident Nurse Attendants (Female), 2 Cooks 5 Maids, 1 Steward, 2 Clerks, 2 Engineers, 3 Stokers, 4 Porters, 1 Baker, 1 Gardener, 5 Labourers, 2 Seamstresses, 1 Head Laundress, 12 Laundry Hands, 15 Cleaners)	.. .. .	114
City Hospital, Seacroft (3 Assistant Medical Officers, 1 Matron, 3 Assistant Matrons, 1 Sister Tutor, 96 Nurses, 66 Female Servants, 1 Chief Engineer, 1 Steward, 46 Male Servants, including Engineers, Porters, etc., 1 Dispenser, 2 Clerks, 1 Typist)	.. .. .	222
Killingbeck Sanatorium (2 Assistant Medical Officers, 1 Matron, 2 Assistant Matrons, 1 Dispenser, 1 Steward, 1 Clerk, 22 Porters, etc., 6 Sisters, 47 Nurses, 56 Maids, 2 Teachers, 1 Handicrafts Instructor)	.. .. .	142
Gateforth Sanatorium (1 Matron, 1 Sister, 2 Assistant Nurses, 2 Probationer Nurses, 1 Cook, 7 Maids, 1 Bailiff, 1 Handyman, 1 Gardener, 1 Gardener's Labourer and 2 Porters)	.. .. .	20
The Hollies Children's Sanatorium (1 Matron, 1 Sister, 3 Assistant Nurses, 2 Teachers, 1 Cook, 3 Maids, 1 Handyman)	.. .. .	12
Infants' Hospital, Wyther (1 Matron, 1 Sister, 1 Masseuse, 5 Staff Nurses, 16 Probationer Nurses, 1 Nursery Attendant, 1 Cook, 6 Maids, 2 Laundresses, 1 Handyman, 1 Gardener)	.. .. .	36
Spring Bank Residential Nursery (1 Matron, 1 Assistant Matron, 1 Staff Nurse, 11 Probationer Nurses, 3 Housemaids, 1 Gardener, 1 Assistant Gardener)	.. .. .	19
Blenheim Lodge Day Nursery and Blenheim Hostel (1 Matron, 1 Sister, 1 Staff Nurse, 10 Probationer Nurses, 1 Cook, 1 Maid)	.. .. .	15
The Factory-in-the-Field (1 Manager, 1 Clerk. Firewood Department :—(1 Foreman, 12 Men, 1 Female Firelighter Maker, 4 Drivers, 6 Travellers). Brush Department :—(1 Foreman, 4 Brushmakers, 1 Traveller). Printing Department :—(1 Foreman, 2 Printers, 4 Female Feeders), 1 Gardener, 1 Caretaker and Cook, 1 Assistant Cook)	.. .. .	42



# City of Leeds.

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*To the Chairman and Members of the Health Committee.*

*Ladies and Gentlemen,*

*I have pleasure in presenting my report on the Health of the City for the year 1936.*

*In doing so I would direct your attention to the following items on which I have ventured to make a few brief comments.*

## **Statistics.**

1. *The birth-rate, 15.0, reached a higher level than for some years past, probably accounted for by the higher marriage-rate, but the distribution of the births leaves much to be desired. On the other hand, the death-rate, 13.6, and the infant mortality rate 65, were practically the same as for the previous year. The maternal mortality rate 3.27 was one of the lowest on record, and compares most favourably with that of the country as a whole (pp. 2 to 24 and 148).*

## **Infectious Diseases.**

2. *The city was free from any serious epidemic of infectious disease throughout the greater part of the year. I am particularly happy to report the decline in the incidence of diphtheria, though the failure of the public to take advantage of the facilities for free immunization against this disease provided by the Corporation is causing me grave concern. These six disastrous years during which the epidemic raged, causing death and untold damage among the child population, have left an indelible mark on my memory, though they have evidently already been forgotten by the people. The invasion will be repeated—of that there can be no doubt—possibly with even more dire results, unless in the meantime steps are taken to strengthen the defences by building up a community of protected children.*

*It is useless to wait until the invader is outside the walls and then hope to save the city. The price of safety is constant vigilance and the use of such means of protection as medical science has provided. These means are freely placed at the disposal of the public.*



Now that all classes of infectious disease are being admitted to Seacroft Hospital, the need for more single bed or cubicle wards has become imperative if cross infection is to be avoided. The lack of this necessary accommodation is seriously hampering the work of the hospital and impairing its efficiency (pp. 26 to 70).

3. It is very pleasing to be able to report a further drop in the **Tuberculosis.** death-rate from tuberculosis to 0.83 per 1,000 of the population (pulmonary 0.71, non-pulmonary 0.13). This is the third year in succession that a fresh low record has been reached and it will also be noted that the tuberculosis register now contains fewer names than at any time since tuberculosis was added to the list of notifiable diseases.

The progress made in the fight against this insidious and powerful enemy in Leeds during the last ten years has been remarkable and will rank as one of the great achievements of the century.

The new ward of 100 beds for women at Killingbeck Sanatorium has now been completed and was put into commission during the year. It is a worthy addition to the institution and incidentally is the first building belonging to the city designed and built especially for the treatment of tuberculosis.

The reduction in the length of the nursing week has made an increase in the number of nurses employed unavoidable and that in turn has necessitated the finding of more sleeping accommodation. Make-shift arrangements have been made to tide over the difficulty until a new nurses' home can be built. Plans and estimates for this home are at present in course of preparation.

There is still urgent need for accommodation for the surgical type of case which at the moment has to be nursed in hospitals outside and at considerable and inconvenient distance from the city. At one time it was proposed to accommodate the adults in a special block of 30 beds to be built at Killingbeck. Now another and better proposal is under consideration, namely to combine with the County in a comprehensive scheme to serve not only Leeds but other areas of the West Riding. The proposal is at present being examined by the officials of both these bodies, but it is too early to say what the outcome of their deliberations will be. (pp. 108 to 139).

4. In the municipal hospitals the year was one of steady progress. **St. James's Hospital.** Plans for the extension and improvement of St. James's Hospital were

completed and approved by the Council and the Ministry of Health. Tenders have since been accepted for the first section of the work, namely, the Nurses' Home, and by the time this report leaves the hands of the printers building operations will have actually commenced. The other sections will follow almost at once and in two years' time it is hoped the whole scheme will be complete.

The acquisition of the old St. Mary's Vicarage adjoining the hospital will provide the necessary site for the erection of quarters for the resident medical staff. This is an improvement which is much overdue as the present accommodation is neither suitable nor sufficient. (pp. 78 to 105).

**District  
Medical  
Service.**

5. It is a matter of regret to me that no further progress has been made with the reorganisation of the District Medical Service, but difficulties have come in the way which have temporarily held up the scheme.

**Laundries.**

6. Proposals for the centralisation of the laundries attached to the three municipal hospitals have been carried a step further and a centrally situated site off Clarence Road has been acquired and instructions given for the preparation of plans and estimates of cost of the new building. The substitution of one laundry for the three now existing will cut down overhead and working costs considerably and the saving thus effected will go a long way towards meeting the charges for interest and repayment of loan on the new building.

**Advisory  
Committee.**

7. One of the most notable events of the year was the formation of a Joint Hospitals Advisory Committee consisting of representatives of the Voluntary Hospitals Council and the Health Committee. The objects of this committee are first to eliminate wasteful competition between the voluntary and municipal hospitals, secondly to avoid duplication of expensive plant and services, and thirdly to afford opportunities of discussing questions of policy affecting the two organisations. Thus practical, and I hope, permanent effect has been given to Section 13 of the Local Government Act, 1929, and the first step taken to ensure the widest and friendliest co-operation between all the medical institutions in the city.

**Maternity  
and Child  
Welfare.**

8. In the maternity and child welfare section the main item of interest is the new Midwives Act which creates a service of municipal domiciliary midwives. The Leeds Corporation has never employed midwives of its own but has had something akin in the five branch

midwives maintained by the Maternity Hospital at the public expense. As far back as 1917 an agreement was entered into with the Leeds Maternity Hospital whereby that body undertook to place and maintain midwives in such districts of the city as, in the opinion of the Corporation, required their services, any deficit being borne by the Corporation. In the scheme which the Corporation is required to prepare under the new act, it is proposed to incorporate the five midwives already mentioned provided under this agreement so as to obtain a unified scheme under the direct control of the Maternity and Child Welfare Committee. It is further proposed that the teaching of pupil midwives and medical students now undertaken by the five branch midwives shall continue as heretofore under the direction of the medical staff of the Maternity Hospital subject always to the rights and privileges of expectant mothers to choose their own midwife and doctor being recognised. The scheme provides for a total of 35 midwives to serve the whole of the city of whom 12 will be teachers and be remunerated on a slightly higher scale. Each midwife will have her own district, though some districts will have more than one midwife and no midwife will be allowed to take more than 80 cases (60 as a midwife and 20 as a maternity nurse) in the year. Further details of the scheme will be found in the body of the report.

It will be interesting to note the effect of the scheme on the demand for beds in the hospitals and nursing homes. My own feeling is that wherever the home conditions are favourable and there is no abnormality, confinement should take place at home rather than in hospital. Nevertheless, if the demand for beds continues to increase at the same rate as it has done in the past, there will be no alternative but to enlarge the existing accommodation. Should it be decided to accept this alternative I suggest that the existing accommodation at St. James's and St. Mary's Hospitals be scrapped and an entirely new Maternity Block be erected on a site at the latter where there is plenty of spare land, and that with it be incorporated a ward or wards for infants to take the place of the Infants' Hospital at Wyther which is out-of-date and in need of replacement (pp. 142 to 187).

9. The centralisation of the municipal ambulance service has been in the mind of the Health Committee for years and, I am happy to say, is now about to materialise. Pending the erection of a new station on a site which has been acquired for the purpose in Saxton Lane in the Marsh Lane district, temporary accommodation has been offered by

**Ambulance  
Service.**

the Transport Committee in its depot at Donisthorpe Street, and the service will start in the Autumn. The service will take over the ambulances of the Watch, Public Assistance and Health Committees, with the exception of the infectious diseases ambulances which will continue to be based on Seacroft Hospital. Cases of sudden illness, accidents, maternity cases and cases to be admitted to the municipal hospitals will be dealt with. There is great need for such a service as this and I hope it will prove a boon to the city.

#### Sanitary Work.

10. In the Sanitary Section the year was disturbed by the overcrowding survey which absorbed the time of the sanitary inspectors for a great portion of the year and seriously disorganised the work of the department. However, things are now back to normal and every effort is being made to overtake the accumulated arrears.

If I may allude to a matter which does not strictly come within my province, I should like to say how much I appreciate the decision of the Cleansing Committee to substitute motor for horse transport in the collection of household refuse. This is a reform of the first importance and one which will greatly benefit the public health (pp. 230 to 252).

#### Housing.

11. The achievements as far as my side of the housing programme is concerned have been extremely disappointing. Only one representation was made during the year and that in January, since when there has been no other. The official programme is therefore more than a year behind and it is doubtful if that lost year will ever be recaptured. The circumstances underlying the delay I appreciate were beyond control but they are none the less regrettable (pp. 262 to 274).

#### Office Accommodation.

12. Finally, I must once more refer to the need for a new and more commodious home for the Department, which has outgrown its present one to such an extent that there is literally not an inch of spare accommodation. We have reached the point of having to convert storerooms and attics into offices to find room for the staff necessary to carry on the ordinary departmental activities. Unless something is done to relieve the situation it will be utterly impossible to undertake any new commitments entailing the appointment of additional staff.

In concluding my opening letter, I should like to acknowledge my indebtedness to my Deputy and to all the senior officers

*who have assisted me in the compilation of this report and in the work of the Department throughout the year. I should also like to express my gratitude to all members of the staff without whose help and support always given willingly and without grudge, this report could not have been written.*

*I am,*

*Ladies and Gentlemen.*

*Your obedient Servant,*

*J. JOHNSTONE JERVIS*

*Public Health Department,*

*Leeds, 1,*

*August, 1937.*



# SUMMARY,

## 1936.

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LATITUDE 53°48' North.      LONGITUDE 1°32' West.

AVERAGE HEIGHT ABOVE SEA LEVEL 250 feet.

AREA OF CITY	..	..	..	..	..	38,105 Acres.
POPULATION (Registrar-General's estimate)	..	..	..	..	..	489,800
ESTIMATED NUMBER OF HOUSES	..	..	..	..	..	145,074
RATEABLE VALUE	..	..	..	..	..	£3,544,378
SUM REPRESENTED BY A PENNY RATE	..	..	..	..	..	£13,705

					Average.
					<b>1936. 1926-35.</b>
BIRTH RATE (births per 1,000 living)	..	..	..	14·99	15·33
MARRIAGE RATE (persons married per 1,000 living)	..	..	..	18·54	16·63
DEATH RATE (deaths per 1,000 living)	..	..	..	13·61	13·40
NATURAL INCREASE OF POPULATION (Excess of births over deaths in the year)	..	..	..	674	929
INFANT MORTALITY RATE (Deaths under 1 year per 1,000 births)	..	..	..	65	80
DEATH RATE from Pneumonia and Bronchitis	..	..	..	1·36	1·73
„ „ Cancer	..	..	..	1·72	1·50
„ „ Diarrhoea and Enteritis (under 2 years) per 1,000 births	..	..	..	9·67	11·87

				Cases	Case- rate	Deaths.	Death rate.
SCARLET FEVER	..	..	..	1,868	3·81	12	0·02
DIPHTHERIA	..	..	..	799	1·63	36	0·07
TYPHOID FEVER	..	..	..	4	0·01	..	..
MEASLES	..	..	..	9,171	18·72	49	0·10
PULMONARY TUBERCULOSIS	..	..	..	531	1·08	346	0·71
OTHER FORMS OF TUBERCULOSIS	..	..	..	163	0·33	62	0·13

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**Natural and Social Conditions.**

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## NATURAL AND SOCIAL CONDITIONS.

**Area.**—The area of the city is 38,105 acres.

**Population.**—The Registrar General's estimate of the resident population at the mid-year of 1936 was 489,800, and the allocation to the 26 wards of the city is given on page 3.

**Dwelling-houses.**—The total number of dwelling-houses in the city at the 1931 census was 128,913, made up of 126,056 occupied, 1,816 vacant, and 1,041 vacant but furnished. The number of occupied dwellings at the end of 1936 was 141,824, and the number unoccupied 3,250, an increase of 3,121 occupied and 300 unoccupied as compared with the previous year.

**Rateable Value.**—The rateable value of the city in 1936 was £3,544,378 and the estimated product of a penny rate £13,705. The corresponding figures for 1935 were £3,479,554 and £13,422.

**Principal Industries.**—The principal industries in the city have not changed during the year but remain as mentioned in previous reports.

During the year unemployment showed still further signs of improvement. The average number of persons registered as wholly or partially unemployed was 21,065 as compared with 23,846 for 1935, a decrease of 2,781. In January, 1936, the number was 26,471, in May 18,359, in September 22,687, and in December 19,981.

The unemployment figures for males and females continue to decline, but there was a slight increase of 24 in the number of juveniles as compared with the previous year.

Year.	Average number of persons on the Unemployment Register.			
	Males.	Females.	Juveniles.	Total.
1931 ..	26,098	10,200	1,099	37,397
1932 ..	27,363	8,699	855	36,917
1933 ..	24,853	6,034	475	31,362
1934 ..	20,347	5,648	373	26,368
1935 ..	18,911	4,676	259	23,846
1936 ..	16,236	4,546	283	21,065



## POPULATION IN WARDS.

MUNICIPAL WARD.	Census, April 26th, 1931	Estimated Population middle of 1936.
Mill Hill and South .. ..	15,672	14,999
Westfield .. ..	19,455	17,641
Blenheim .. ..	22,947	21,530
Central .. ..	20,985	18,605
Woodhouse .. ..	18,689	18,259
North .. ..	15,475	18,460
Far Headingley .. ..	18,251	19,700
Hyde Park .. ..	16,548	16,013
Kirkstall .. ..	19,582	22,017
Burmantofts .. ..	22,974	20,847
Harehills .. ..	19,724	23,229
Potternewton .. ..	19,631	19,170
Roundhay .. ..	15,151	19,775
Cross Gates and Temple Newsam	14,439	16,431
Richmond Hill .. ..	24,260	19,976
Osmondthorpe .. ..	21,570	21,881
East Hunslet .. ..	18,370	17,624
Hunslet Carr and Middleton	19,916	21,559
West Hunslet .. ..	18,044	17,069
Beeston .. ..	15,220	16,947
Holbeck (South) .. ..	14,324	13,759
Holbeck (North) .. ..	18,241	16,876
Armley and New Wortley ..	20,181	19,787
Upper Armley .. ..	16,953	16,906
Bramley .. ..	17,631	20,180
Farnley and Wortley .. ..	18,576	20,560
City .. ..	482,809	489,800

**Meteorological Conditions.**—The hours of bright sunshine registered during the year were 1,142·67 as compared with 1,368·67 for the previous year and an average of 1,185·41 for the previous five years. The sunniest month was August with a daily average of 5·34 hours and the darkest January with a daily average of 0·98 hours. The daily average for the whole year was 3·12 hours as compared with 3·75 for the previous year.

The total rainfall was 31·24 inches as compared with 31·70 in 1935 and an average of 27·18 for the previous quinquennium. The driest month was August with a total of 1·43 inches and the wettest January with a total of 4·21 inches. Taking the four quarters of the year, the rainfall in the first quarter was 9·21; in the second 7·75; in the third 7·49; and in the fourth 6·79 inches.

The month with the highest average temperature was August with 64·23 degrees and the lowest February with 36·63 degrees. The average temperature for the whole year was 51·85 degrees as compared with 53·45 for the previous year.

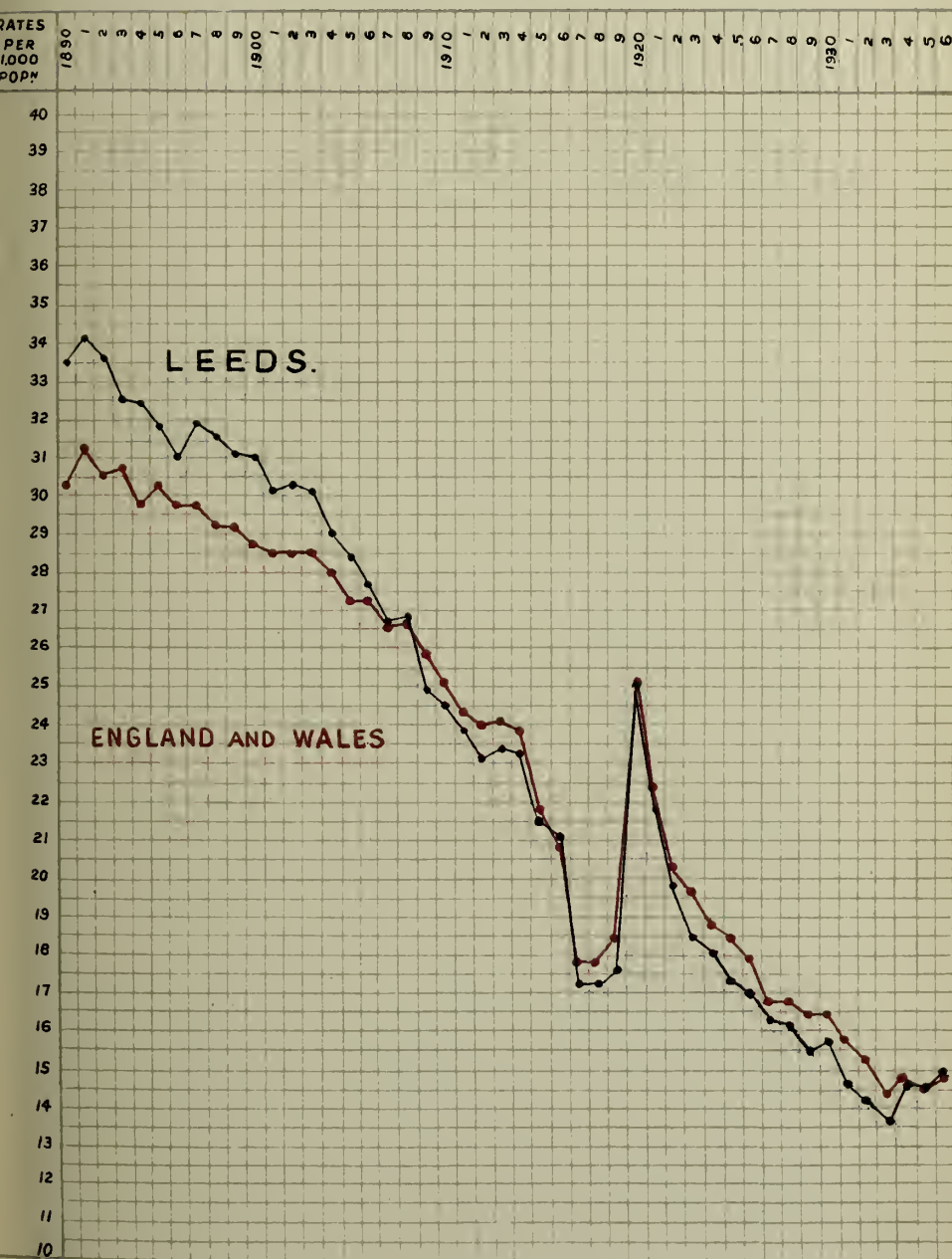
**National Health Insurance Acts.**—The total number of insured persons in the City under the National Health Insurance Acts on December 31st, 1936 was 226,458 as compared with 219,666 on January 1st. The number of doctors, including assistants, on the panel at the end of the year was 238 and the number of prescriptions dispensed was 1,171,851. The corresponding figures for the previous year were 271 and 1,128,903.

### VITAL AND MORTAL STATISTICS.

**Marriages.**—The number of marriages which took place in Leeds during the year was 4,540 corresponding to a marriage rate of 18·5 as compared with 4,446 and a rate of 18·3 for the previous year and an average of 4,098 and 16·9 for the previous five years. This is the highest marriage rate recorded in Leeds since the post-war years 1919, 1920 and 1921, and is probably accounted for by the improvement in trade and the greater fluidity of the housing position. The fact that for three years in succession the figure has been round about the 18 mark has no doubt been an important factor in the increase of the birth rate which during the same period has been on the upward grade. It is unlikely that the rate can be maintained at this figure for much longer as the further we get away from the post-war years when the birth-rate was abnormally high the fewer will become the persons of marriageable age in the community.

The marriage rate for England and Wales for 1936 was 17·3 and for 1935, 17·2.

# BIRTH RATE, 1890 - 1936.





**Births.**—The births registered during the year numbered 7,845 comprising 4,043 males and 3,802 females. Of these 382 males and 324 females born to parents not belonging to Leeds were transferred out whilst 98 males and 103 females born outside the city to Leeds parents were transferred in, making a nett total of 7,340 births, comprising 3,759 males and 3,581 females. Compared with the previous year this represents an increase of 59 males and 70 females, or a total increase of 129.

The birth-rate was 15·0 as compared with 14·8 for the previous year and an average of 14·5 for the previous five years. This rate is the highest recorded in Leeds since 1930 when it was 15·8.

As has been pointed out in a previous paragraph the increase in the birth-rate is probably very largely accounted for by the increase in the marriage rate. If that assumption is correct, with a return of the marriage rate to normality there will be a corresponding decrease in the birth-rate. I am inclined to regard the present comparatively high rate of birth as being purely temporary and not the result of a general increase of fertility in the population as a whole. If there is anything in the contention that the main factor in keeping the birth-rate low is the economic one, then with the improved industrial situation and the freer circulation of money the rate ought to rise and to do so fairly steeply. So far there are no signs of this taking place. On the contrary, apart from the increase of the rate directly attributable to the greater number of marriages there would in all probability be not an increase but a decrease. The small or non-existent family is in my opinion due to deliberate choice and not to the pressure of economic circumstances in the large majority of cases.

The differential birth-rate still shows the highest number of births to be amongst the poorest section of the community and the lowest among the richest. For example, in Hunslet Carr and Middleton where the economic level is very low the birth-rate was 19·0, whereas in Far Headingley where the economic level is relatively high the birth-rate was only 9·6.

The table appended gives the marriage and birth-rates for the years 1911-1936 and it will be noticed that there were increases in both rates.

## MARRIAGE AND BIRTH-RATES 1911-1936.

Year.	No. of Marriages.	Marriage rate per 1,000 Population.	No. of Births.	Birth-rate per 1,000 Population.
1911	3,717	15.7	10,562	23.8
1912	3,801	16.0	10,309	23.1
1913	3,925	16.4	10,877	23.4
1914	4,008	16.6	10,652	23.3
1915	4,858	20.2	9,877	21.5
1916	3,701	15.5	9,432	21.1
1917	3,300	14.2	7,566	17.3
1918	3,710	15.5	7,392	17.3
1919	5,083	21.2	7,564	17.6
1920	5,620	23.5	11,229	25.0
1921	4,566	18.7	10,144	21.8
1922	4,183	17.2	9,253	19.8
1923	4,001	16.3	8,684	18.5
1924	4,023	16.3	8,558	18.1
1925	3,807	15.4	8,180	17.3
1926	3,644	14.8	8,065	17.0
1927	4,028	16.7	7,790	16.3
1928	3,927	16.5	7,665	16.1
1929	3,990	16.7	7,426	15.5
1930	3,948	16.5	7,568	15.8
1931	3,802	15.6	7,219	14.8
1932	3,851	15.9	7,004	14.4
1933	3,994	16.5	6,643	13.7
1934	4,395	18.1	7,190	14.8
1935	4,446	18.3	7,211	14.8
1936	4,540	18.5	7,340	15.0

The chart opposite page 8 shows the marriage and birth-rates for the years 1904-1936.

An examination of the tables on pages 9 and 19 in which are set out the birth and death-rates for the 26 wards of the city, discloses the fact that in nine of the wards, viz., Blenheim, Central, Far Headingley, Hyde Park, Harehills, Potternewton, West Hunslet, Holbeck (South), and Upper Armley, the death-rate was higher than the birth-rate. The estimated population of these nine wards is 165,981 or 33.9 per cent. of the population of the city. Taking the nine wards as a whole, the birth-rate was 12.7 and the death-rate 14.5. In 1935 the wards with a death-rate higher than the



birth-rate numbered eight with a total estimated population of 145,197 or 29·8 per cent. of the population of the city. Furthermore, in two other wards, the birth and death-rates were practically the same or showed only a very small advantage in favour of the former. The significance of these figures is that one-third, or more, of the population is failing to replace itself or even make good its losses by death.

Compared with the other large towns in England and Wales, Leeds occupied ninth place, the towns with lower rates being Manchester, Bristol, London and Bradford.

*Births in Wards.*—The distribution of the births in the various wards is shown in the table appended. In fourteen of the wards, namely, North, Hunslet Carr and Middleton, Westfield, Burmantofts, Holbeck (North), Osmondthorpe, Armley and New Wortley, Richmond Hill, Central, Woodhouse, East Hunslet, Cross Gates and Templenewsam, Bramley, and Farnley and Wortley, the birth-rate was higher than that for the city as a whole, whilst in the remainder, Harehills, Kirkstall, West Hunslet, Beeston, Mill Hill and South, Holbeck (South), Upper Armley, Blenheim, Roundhay, Hyde Park, Potternewton, and Far Headingley, it was lower. The wards with the highest rates were in order, North, Hunslet Carr and Middleton, Westfield, Burmantofts, and Holbeck (North), all of which were above 17, and averaged 18·7, whilst those with the lowest were Far Headingley, Potternewton, Hyde Park, and Roundhay, with a rate under 12 and averaging 10·9.

*Excess of Births over Deaths.*—The excess of births over deaths or what is generally spoken of as the “natural increase of the population” was 674 as compared with 779 in 1935 and an average of 929 for the previous ten years.

The decline in the natural increase of the population during the last fifteen years has been steady and the trend is still definitely in the downward direction and that notwithstanding the higher birth-rate during the last three years. If the fall continues at the same rate it seems certain that by the end of the decade the balance will be transferred from the credit to the debit side. In other words the population will be living entirely on its capital, not a healthy condition for any population to be in.

## BIRTH RATE.

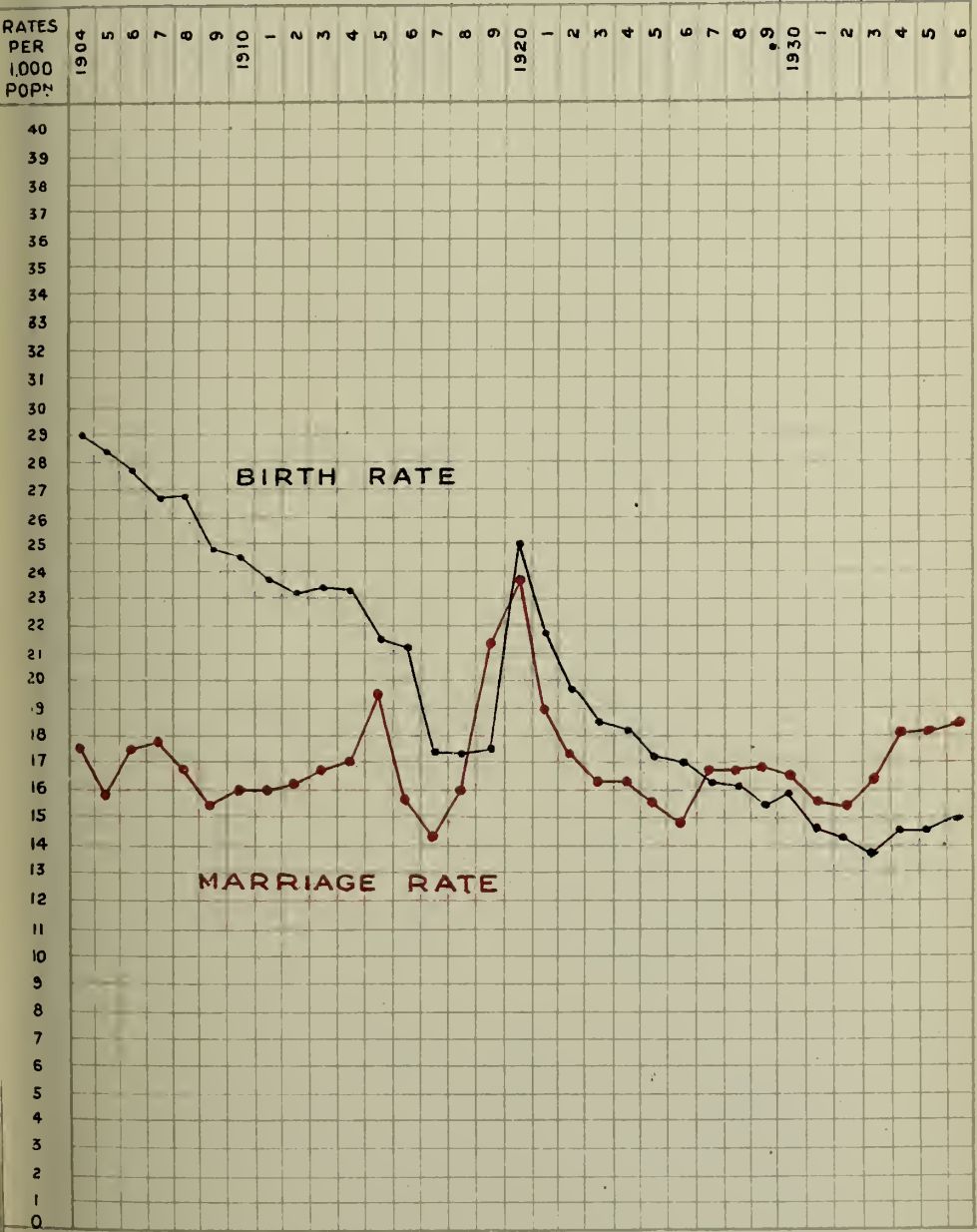
Year.	No. of births.	Birth rate, LEEDS.	England and Wales.
1890-1894 .. ..	62,270	33·2	30·5
1895-1899 .. ..	63,873	31·5	29·6
1900-1904 .. ..	64,791	30·1	28·4
1905-1909 .. ..	59,117	26·9	26·7
1910-1914 .. ..	53,267	23·6	24·2
1915-1919 .. ..	41,831	19·0	19·4
1920 .. .. ..	11,229	25·0	25·5
1921 .. .. ..	10,144	21·8	22·4
1922 .. .. ..	9,253	19·8	20·4
1923 .. .. ..	8,684	18·5	19·7
1924 .. .. ..	8,558	18·1	18·8
1925 .. .. ..	8,180	17·3	18·3
1926 .. .. ..	8,065	17·0	17·8
1927 .. .. ..	7,790	16·3	16·7
1928 .. .. ..	7,665	16·1	16·7
1929 .. .. ..	7,426	15·5	16·3
1930 .. .. ..	7,568	15·8	16·3
1931 .. .. ..	7,219	14·8	15·8
1932 .. .. ..	7,004	14·4	15·3
1933 .. .. ..	6,643	13·7	14·4
1934 .. .. ..	7,190	14·8	14·8
1935 .. .. ..	7,211	14·8	14·7
1936 .. .. ..	7,340	15·0	14·8

## BIRTH RATE IN QUARTERS.

	I.	II.	III.	IV.	Year.
1926 .. ..	17·0	18·5	17·2	15·5	17·0
1927 .. ..	17·0	17·3	15·6	15·4	16·3
1928 .. ..	16·0	17·6	16·1	14·9	16·1
1929 .. ..	15·7	16·2	16·2	14·0	15·5
1930 .. ..	16·0	16·6	16·1	14·6	15·8
1931 .. ..	15·3	16·2	14·7	13·2	14·8
1932 .. ..	14·2	16·0	14·5	13·2	14·4
1933 .. ..	14·1	14·6	14·5	11·7	13·7
1934 .. ..	15·1	16·1	14·2	13·8	14·8
1935 .. ..	14·5	15·4	14·9	14·5	14·8
1936 .. ..	14·6	16·2	15·3	13·9	15·0



BIRTH RATE AND MARRIAGE RATE. 1904 - 1936.





## BIRTHS AND BIRTH RATE IN WARDS.

MUNICIPAL WARD.	Estimated Population middle of 1936.	Nett births.	Birth- rate.	Illegiti- mate births.	Percentage of illegitimate births to total births.
Mill Hill and South ..	14,999	195	13·00	15	7·7
Westfield .. ..	17,641	320	18·14	27	8·4
Blenheim .. ..	21,530	260	12·08	54	20·8
Central .. ..	18,605	304	16·34	35	11·5
Woodhouse.. ..	18,259	298	16·32	16	5·4
North .. ..	18,460	380	20·59	13	3·4
Far Headingley .. ..	19,700	190	9·64	6	3·2
Hyde Park.. ..	16,013	182	11·37	11	6·0
Kirkstall .. ..	22,017	314	14·26	11	3·5
Burmantofts .. ..	20,847	377	18·08	21	5·6
Harehills .. ..	23,229	335	14·42	16	4·8
Potternewton .. ..	19,170	213	11·11	19	8·9
Roundhay .. ..	19,775	231	11·68	4	1·7
Cross Gates and Temple- newsam .. ..	16,431	253	15·40	5	2·0
Richmond Hill .. ..	19,976	336	16·82	9	2·7
Osmondthorpe .. ..	21,881	369	16·86	19	5·1
East Hunslet .. ..	17,624	277	15·72	15	5·4
Hunslet Carr & Middleton	21,559	409	18·97	17	4·2
West Hunslet .. ..	17,069	237	13·88	5	2·1
Beeston .. ..	16,947	221	13·04	7	3·2
Holbeck (South) .. ..	13,759	177	12·86	5	2·8
Holbeck (North) .. ..	16,876	299	17·72	11	3·7
Armley and New Wortley	19,787	333	16·83	17	5·1
Upper Armley .. ..	16,906	211	12·48	10	4·7
Bramley .. ..	20,180	308	15·26	7	2·3
Farnley and Wortley ..	20,560	311	15·13	10	3·2
City .. ..	489,800	7,340	14·99	385	5·2

*Births into Families.*—For the last eleven years investigations have been made as to the size of family into which children have been born and the table on page 11 gives the results of those investigations. It will be observed that whereas in 1926, 71·4 per cent. of the births investigated were into families of two children and under, the percentage in 1936 rose to 79·2; on the other hand

the percentage of births occurring in families of more than six children fell from 6·2 in 1926 to 4·1 in 1936. It is worthy of note that over 40 per cent. of the births were first children, a higher figure than has been noted since the investigation began in 1926, which proves the statement made in a previous paragraph that the increase in the birth-rate recorded in 1934, 1935 and 1936 is largely due to the greater number of marriages.

*Illegitimate Births.*—Of the 7,340 (nett) births registered, 6,955 (3,578 males, 3,377 females) or 94·8 per cent. were legitimate and 385 (181 males, 204 females) or 5·2 per cent. were illegitimate.

The ratio of illegitimate to legitimate was 1 to 18 as compared with 1 to 19 for the previous year.

#### ILLEGITIMATE BIRTHS.

YEAR.	Illegitimate births.	Percentage of nett births registered.	Rate per 1,000 estimated population.
1925 ..	422	5·2%	0·89
1926 ..	434	5·4%	0·92
1927 ..	371	4·8%	0·78
1928 ..	390	5·1%	0·82
1929 ..	410	5·5%	0·86
1930 ..	374	4·9%	0·78
1931 ..	358	5·0%	0·74
1932 ..	370	5·3%	0·76
1933 ..	335	5·0%	0·69
1934 ..	381	5·3%	0·78
1935 ..	360	5·0%	0·74
1936 ..	385	5·2%	0·79

Reference to the illegitimate death-rate will be found on pages 148 and 150.

BIRTHS OCCURRING IN ORDER OF SIZE OF FAMILY.

	1926.		5 yrs. 1926—1930		5 yrs. 1931—1935.		1935.		1936.	
	Births.	Percent-age.	Births.	Percent-age.	Births.	Percent-age.	Births.	Percent-age.	Births.	Percent-age.
No children	2,645	33.03	13,191	34.68	13,210	38.31	2,784	39.02	2,971	40.92
1 child	1,924	24.03	8,991	23.64	8,570	24.85	1,840	25.79	1,850	25.48
2 children	1,152	14.39	5,501	14.46	4,663	13.52	937	13.13	927	12.77
3 "	771	9.63	3,512	9.23	2,819	8.18	565	7.92	503	6.93
4 "	498	6.22	2,306	6.06	1,683	4.88	344	4.82	344	4.74
5 "	325	4.06	1,528	4.02	1,192	3.46	218	3.06	224	3.09
6 "	196	2.45	994	2.61	853	2.47	165	2.31	144	1.98
7 "	166	2.07	679	1.79	578	1.68	97	1.36	105	1.45
8 "	122	1.52	498	1.31	365	1.06	89	1.25	97	1.34
9 "	86	1.07	324	0.85	233	0.68	44	0.62	39	0.54
10 "	54	0.67	232	0.61	123	0.36	25	0.35	25	0.34
11 "	35	0.44	136	0.36	81	0.23	12	0.17	15	0.21
12 "	20	0.25	75	0.20	58	0.17	7	0.10	7	0.10
13 "	3	0.04	24	0.06	33	0.10	5	0.07	3	0.04
14 "	4	0.05	18	0.05	10	0.03	2	0.03	3	0.04
15 "	4	0.05	11	0.03	4	0.01	..	..	1	0.01
16 "	3	0.04	8	0.02	5	0.01	..	..	2	0.03
17 "	..	..	3	0.01	..	..	..	..	..	..
Total births investigated	8,008	100	38,031	100	34,480	100	7,134	100	7,260	100

**Stillbirths.**—The number of stillbirths registered during the year was 377, comprising 206 males and 171 females. The inward transfers numbered three, all males, and the outward transfers 60, namely 36 males and 24 females, which after adjustment leaves a nett total of 320 made up of 173 males and 147 females. The rate per thousand of the population was 0·65 as compared with 0·69 for the previous year. The rate for England and Wales was 0·61. Expressed as a percentage of the total births (nett) the rate was 4·2 as compared with 4·4 for the previous year. Of the 320 nett stillbirths, 299, or 93·4 per cent. were legitimate and 21, or 6·6 per cent. were illegitimate. The ratio of registered “still” to registered “live” births was 1 to 23 as compared with 1 to 22 for the previous year.

Details respecting the notification and visitation of stillbirths are given on pages 169 and 170.

**Deaths.**—The gross number of deaths registered during the year was 7,003, comprising 3,655 males and 3,348 females, giving a gross death-rate of 14·3 as compared with 13·9 for the previous year and an average of 13·9 for the previous five years. The inward transfers numbered 283, namely 128 males and 155 females, and the outward transfers 620, namely 349 males and 271 females, which after adjustment leaves a nett total of 6,666 deaths debitable to the city, made up of 3,434 males and 3,232 females. The corresponding nett death-rate was 13·6 as compared with 13·2 for the previous year and an average of 13·3 for the previous five years.

Leaving out of account the year 1929 when the rate was abnormally high due to the prevalence of influenza, there has been very little change in the death-rate during the last ten years. It has neither increased nor decreased but remained more or less stationary, around the figure of 13. When it does change it will be upwards rather than downwards because of the increasing age of the population as a whole and the relatively larger number of the population in the older age groups.

*Comparison with other Towns.*—Amongst the thirteen large towns in England and Wales, Leeds had the highest nett death-rate with the exception of Bradford.

*Standardized Death-rate.*—The Registrar General is now supplying an Area Comparability Factor (A.C.F.) by which the crude death-rate of the area can be multiplied in order to make it comparable with the crude death-rate of the country as a whole or with that of any other local area, the crude death-rate of which should be similarly adjusted by its own factor for the purpose.

The following table gives the crude and standardized death-rates of Leeds compared with the death-rate of England and Wales.

Year.	Population.	Crude Death-rate.	Standardized Death-rate.	Death-rate England and Wales.
1931 ..	486,400	13·4	14·3	12·3
1932 ..	484,900	13·3	14·2	12·0
1933 ..	485,000	13·6	14·6	12·3
1934 ..	486,250	12·9	13·8	11·8
1935 ..	487,200	13·2	14·1	11·7
1936 ..	489,800	13·6	14·6	12·1

The death-rate for England and Wales was 12·1 or 11·0 per cent. less than the crude death-rate of Leeds and 17·1 per cent. less than the standardized death-rate.

*Standardized Death-Rates. (Comparison with other Towns).*—An examination of the table on page 17 shows that judged by the standardized death-rate Leeds occupies a more favourable position among the other towns than when judged by the crude death-rate. On the crude death-rate comparison Bradford only had a higher death-rate in 1936, whereas on the standardized death-rate comparison, Liverpool, Newcastle, Stoke-on-Trent and Manchester as well as Bradford had higher rates.

*Death-rates in Quarters.*—The death-rate for the first quarter was 17·4; for the second 12·9; for the third 10·7; and for the fourth 13·5.



## DEATH RATE IN QUARTERS.

	I.	II.	III.	IV.	Year.
1925 .. ..	14·8	11·4	10·8	14·1	12·8
1926 .. ..	15·7	12·7	9·9	13·1	12·8
1927 .. ..	17·5	12·2	10·1	12·2	13·0
1928 .. ..	14·6	13·0	10·2	13·9	12·9
1929 .. ..	29·2	14·2	11·0	11·9	16·5
1930 .. ..	14·1	11·8	10·5	13·2	12·4
1931 .. ..	17·4	13·1	10·6	12·5	13·4
1932 .. ..	15·8	13·3	10·6	13·6	13·3
1933 .. ..	19·0	12·3	10·0	13·0	13·6
1934 .. ..	16·2	12·8	10·5	12·3	12·9
1935 .. ..	14·5	14·3	11·1	13·0	13·2
1936 .. ..	17·4	12·9	10·7	13·5	13·6

*Death-rates in Wards.*—The table on page 19 gives the deaths and death-rates of the 26 wards of the city. The wards with the highest rates were in order, Blenheim (17·65), Westfield (16·55) and Central (16·50), whilst those with the lowest were Roundhay (10·16), Crossgates and Templenewsam (11·08) and Kirkstall (11·54). The difference between the highest and the lowest, that is Blenheim and Roundhay, amounted to 7·49, or 73·7 per cent., whilst that between the highest and the city was 4·04 or 29·7 per cent.

*Causes of Death.*—The principal causes of death were in order of numerical importance, organic heart disease, cancer, arterio sclerosis, pneumonia, cerebral haemorrhage and pulmonary tuberculosis which together accounted for 61·1 per cent. of the total deaths. Last year this group of diseases was responsible for 59·7 per cent. of the total deaths.

Diseases of the respiratory system, including pneumonia, bronchitis and influenza, but excluding pulmonary tuberculosis, accounted for 803 or 12·05 per cent. of the total deaths from all causes. Last year this group of diseases was responsible for 12·00 per cent. of the total deaths and the percentage for the previous five years was 14·39.



The number of children under five years of age who died from respiratory diseases in 1936 was 142 or 21·8 per cent. of the total deaths under five, as compared with 121 or 18·5 per cent. for the previous year, and an average of 173 or 22·0 per cent. for the previous five years.

The only member of the group of important causes of death to show an increase of any importance was organic heart disease which rose from 2·73 in 1935 to 3·16 in 1936. Cancer also increased but not to the same extent, indeed the increase was so small as hardly to vary the death-rate from this disease. In my last Annual Report I remarked upon the rapid increase in the number of deaths from organic heart disease and suggested that it was due chiefly to the re-classification of the causes of death, the effect of which is to eliminate that very unsatisfactory cause of death, old age or senile decay. Senility is not a disease, though it does lead to important degenerative changes in certain of the vital organs of the body. It is these changes that are the cause of death and an attempt is now being made to narrow them down to a definite organ, *e.g.* the heart, the lungs, the blood vessels, and so on. Up to fairly recent years it was no uncommon thing to have deaths of individuals of 60 years of age or thereabouts being ascribed to senility, which of course is misleading and obviously wrong.

For notes on infantile diarrhoea, bronchitis, pneumonia and tuberculosis, see pages 41, 44, and 108.

*Deaths from Street Accidents.*—The number of street accidents having a fatal termination during the year was 54, of which 42, or 77·8 per cent. were due to motor vehicles. Last year the number was 71 of which 64 or 90·1 per cent. were due to this cause.

On reference to the table on page 23 it will be seen that 28, or 51·9 per cent., of the total deaths were amongst children under 15 years and adults over 65, whilst 26, or 48·1 per cent., were in the age groups between 15 and 65. These figures represent a decrease of 12 in the number of deaths of children and adults over 65, and a decrease of 5 in the age groups between 15 and 65, or a total decrease of 17, as compared with the previous year.

*Deaths in Age Groups.*—The table on page 22 sets out the deaths according to age groups. The aggregate number of deaths of children in the age groups 0-1, 1-2, and 2-5, was 650, or 9·8 per cent. of the total deaths as compared with 653, or 10·2 per

cent., for the previous year and an average of 784, or 12·1 per cent., for the previous five years. The mortality of children under five years has been steadily decreasing for the last 36 years. To-day instead of being the largest group as it was in 1900, it is one of the smallest. When analysed in single years the decrease proves to have been most marked in children between 1-2.

The table also shows that the deaths of persons under 45 years numbered 1,574 or 23·6 per cent. of the total deaths, as compared with 1,674 or 26·0 per cent. for the previous year. Of the remaining deaths 1,991 or 29·9 per cent. occurred in the age group 45-65, whilst 3,101, or 46·5 per cent., were in the age group 65+.

One of the less favourable features of this age group analysis is the continued high rate of death between 45 and 65 years of age. In the last ten years, the rate has hardly varied, indeed the tendency has been to increase. For an explanation one must consult the principal causes of death when it will be found that these were in order, organic heart disease, cancer, pulmonary tuberculosis, cerebral hæmorrhage, pneumonia, and arterio sclerosis. With the possible exception of pulmonary tuberculosis and pneumonia all these fall into the category of unavoidable causes. Further research is obviously required if there is to be any material saving of life at this age period.

COMPARISON OF PERCENTAGES OF DEATHS IN THE VARIOUS AGE GROUPS OF 1936, AS COMPARED WITH THE PREVIOUS DECENNium.

Period.	-1	1-2	2-5	5-15	15-25	25-45	45-65	65+
1926—1935 ..	9·1	2·3	2·4	2·6	4·0	10·9	28·2	40·5
Year 1936 ..	7·1	1·3	1·4	1·6	2·8	9·4	29·9	46·5
Decrease -	2·0	1·0	1·0	1·0	1·2	1·5	—	—
Increase +	—	—	—	—	—	—	1·7	1·0

*Infant Mortality.*—The number of deaths of children under one year of age numbered 476, or 7·1 per cent. of the total deaths. The infant mortality rate corresponding was 65, or one more than the previous year (64) and 11 less than the average for the previous five years (76).

This subject is dealt with in greater detail on page 142.

## Comparative Statistics of the larger English Cities, 1936.

	RATE PER 1,000 POPULATION.						DEATH RATE PER 1,000 BIRTHS.	
	Population.	Birth Rate.	Death Rate.	Adjusted Death Rate.	Phthisis Death Rate.	Other Tuberculosis Rate.	Deaths under One Year.	Diarrhoea and Enteritis under 2.
London ..	4,141,100	13·6	12·3	12·6	0·69	0·09	66	14·47
Birmingham ..	1,038,000	15·8	11·3	12·4	0·71	0·07	62	5·37
Liverpool ..	867,110	20·1	12·9	14·8	0·82	0·14	75	7·35
Manchester ..	759,058	14·7	13·5	15·4	0·87	0·14	77	6·44
Sheffield ..	518,200	15·2	12·2	13·8	0·58	0·10	59	5·83
Leeds ..	489,800	15·0	13·6	14·6	0·71	0·13	65	9·67
Bristol ..	413,900	14·2	12·3	12·0	0·71	0·10	48	4·07
Hull ..	321,500	18·4	12·7	14·0	0·79	0·16	65	9·80
Bradford ..	290,500	13·4	14·9	14·9	0·52	0·14	82	9·75
Newcastle ..	290,400	15·6	13·1	14·8	0·90	0·14	90	12·44
Nottingham ..	279,400	15·2	13·2	13·6	0·83	0·10	89	9·7
Stoke-on-Trent	273,100	16·8	12·4	15·1	0·73	0·12	74	9·59
West Ham ..	265,800	15·7	11·6	13·3	0·7	0·1	70	17·0

**Cremation.**—Out of a total of 6,666 Leeds deaths during 1936, the number of bodies disposed of by cremation was 93, or 1·40 per cent., as compared with 96, or 1·49 per cent. for the previous year.

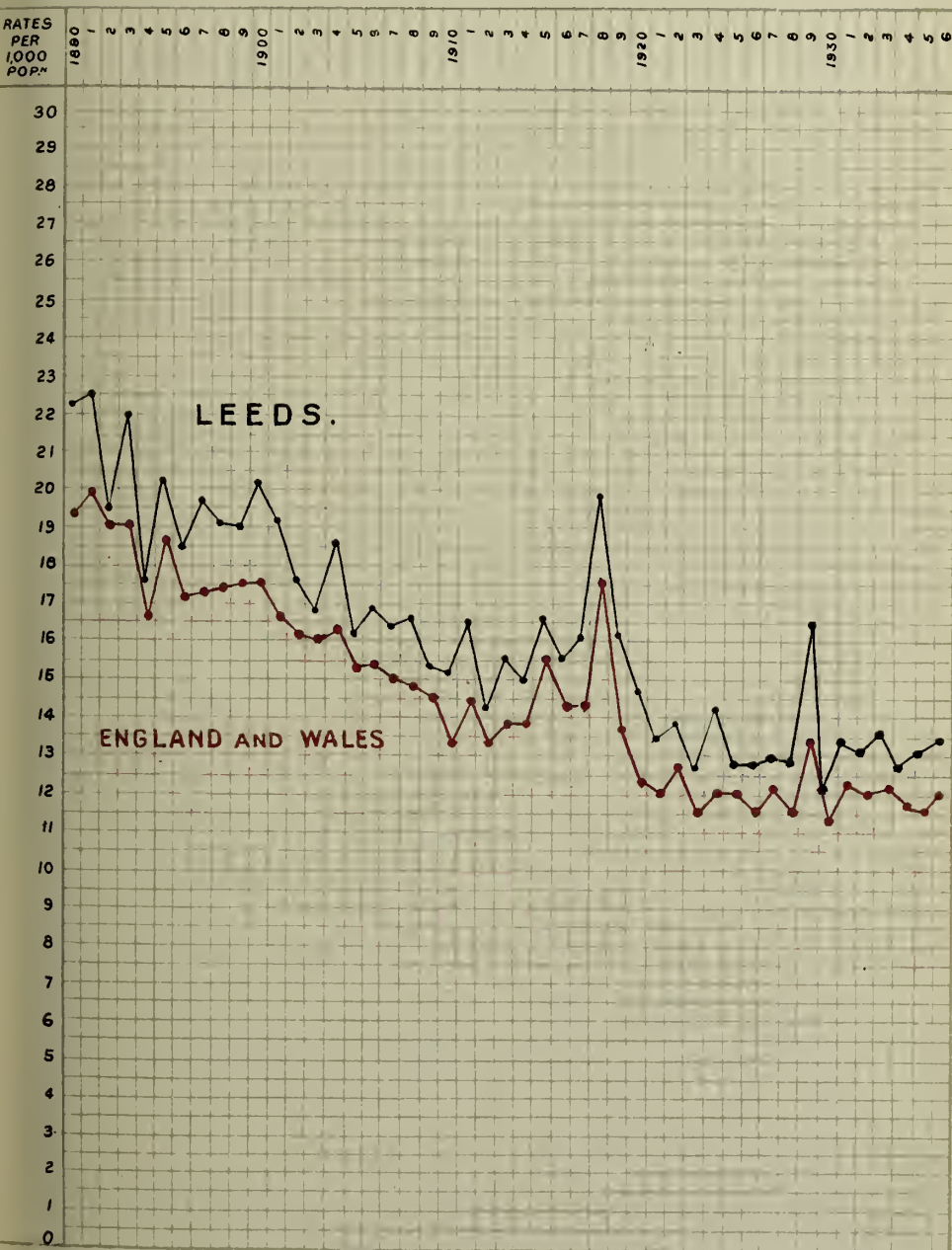
The table on page 24 shows the number of cremations which have taken place year by year since 1905. It does not make encouraging reading, indeed from a public health point of view it is most discouraging as it proves how deep rooted is the prejudice against this very desirable sanitary reform. Unfortunately it is not a subject that lends itself to intensive propaganda though it is one that should commend itself to all thinking and intelligent people without the aid of publicity.

## ANNUAL DEATHS AND DEATH RATE.

Year.	Population.	Nett deaths.	Death-rate LEEDS.	Death-rate England and Wales.
1901	429,383	8,204	19·2	16·9
1902	431,043	7,699	17·6	16·3
1903	432,703	7,263	16·8	15·5
1904	434,363	8,039	18·6	16·3
1905	436,023	7,047	16·2	15·3
1906	437,683	7,350	16·9	15·5
1907	439,343	7,167	16·4	15·1
1908	441,003	7,430	16·6	14·8
1909	442,663	6,806	15·4	14·6
1910	444,323	6,711	15·2	13·5
1911	445,983	7,331	16·5	14·6
1912	447,746	6,396	14·3	13·3
1913	457,295	7,237	15·6	13·8
1914	459,260	6,885	15·0	14·0
1915	459,260	7,609	16·6	15·7
1916	446,349	6,946	15·6	14·4
1917	438,254	7,052	16·1	14·4
1918	427,589	8,529	19·9	17·6
1919	430,834	6,992	16·2	13·7
1920	448,913	6,591	14·7	12·4
1921	465,500	6,285	13·5	12·1
1922	466,700	6,479	13·9	12·8
1923	469,900	5,986	12·7	11·6
1924	471,600	6,747	14·3	12·2
1925	472,900	6,037	12·8	12·2
1926	473,400	6,062	12·8	11·6
1927	477,600	6,198	13·0	12·3
1928	474,800*	6,133	12·9	11·7
1929	478,500	7,898	16·5	13·4
1930	478,500	5,930	12·4	11·4
1931	486,400	6,506	13·4	12·3
1932	484,900	6,469	13·3	12·0
1933	485,000	6,574	13·6	12·3
1934	486,250	6,291	12·9	11·8
1935	487,200	6,432	13·2	11·7
1936	489,800	6,666	13·6	12·1

\* Population adjusted to allow for change in boundary during the year. The mid-year population after the change is 476,500.

# DEATH RATE, 1890 - 1936.







## DEATHS AND DEATH RATE IN WARDS.

MUNICIPAL WARD.	Area in Acres.	Estimated population middle of 1936.	Nett deaths.	Death- rate.
Mill Hill and South.. ..	574	14,999	174	11·60
Westfield .. ..	234	17,641	292	16·55
Blenheim .. ..	443	21,530	380	17·65
Central .. ..	312	18,605	307	16·50
Woodhouse .. ..	436	18,259	228	12·49
North .. ..	5,038	18,460	257	13·92
Far Headingley .. ..	5,386	19,700	235	11·93
Hyde Park .. ..	468	16,013	220	13·74
Kirkstall .. ..	1,071	22,017	254	11·54
Burmantofts .. ..	274	20,847	306	14·68
Harehills .. ..	655	23,229	349	15·02
Potternewton .. ..	470	19,170	233	12·15
Roundhay .. ..	3,877	19,775	201	10·16
Cross Gates and Temple- newsam .. ..	5,593	16,431	182	11·08
Richmond Hill .. ..	260	19,976	293	14·67
Osmondthorpe .. ..	1,455	21,881	269	12·29
East Hunslet .. ..	366	17,624	212	12·03
Hunslet Carr and Middleton	2,657	21,559	310	14·38
West Hunslet .. ..	206	17,069	242	14·18
Beeston .. ..	1,166	16,947	211	12·45
Holbeck (South) .. ..	306	13,759	204	14·83
Holbeck (North) .. ..	383	16,876	255	15·11
Armley and New Wortley ..	565	19,787	257	12·99
Upper Armley .. ..	945	16,906	233	13·78
Bramley .. ..	2,114	20,180	301	14·92
Farnley and Wortley ..	2,851	20,560	261	12·69
City .. ..	38,105	489,800	6,666	13·61



## PRINCIPAL CAUSES OF DEATH.

Death rate.	Diseases.	No. of deaths in 1936 (nett).	Increase or decrease compared with 1935.	Houses.	
				Through.	Back-to-back.
..	Enteric Fever .. ..	..	..	..	..
..	Small-pox .. ..	..	..	..	..
0.10	Measles .. ..	49	+ 45	13	36
0.02	Scarlet Fever .. ..	12	+ 7	4	8
0.06	Whooping Cough .. ..	28	- 20	9	19
0.07	Diphtheria .. ..	36	- 24	13	23
0.13	Influenza .. ..	64	- 38	36	28
0.05	Erysipelas .. ..	24	+ 1	13	11
0.71	Pulmonary Tuberculosis ..	346	- 12	142	202
0.13	Other Tuberculous Diseases	62	- 15	26	36
1.72	Cancer, malignant disease	843	+ 40	394	442
0.06	Rheumatic Fever .. ..	31	- 3	14	17
0.02	Meningitis .. ..	10	- 9	3	7
0.81	Cerebral Hæmorrhage ..	399	+ 7	179	220
3.16	Organic Heart Disease ..	1,549	+221	732	801
1.06	Arterio-sclerosis .. ..	518	- 69	251	264
0.50	Bronchitis .. ..	245	+ 15	98	146
0.86	Pneumonia (all forms) ..	419	+ 45	189	227
0.15	Other diseases of respiratory organs .. ..	75	+ 9	39	36
0.18	Diarrhœa and Enteritis ..	89	+ 4	40	48
0.06	Appendicitis and Typhlitis	30	+ 2	13	17
0.02	Cirrhosis of Liver .. ..	12	- 7	5	7
0.41	Nephritis and Bright's Disease .. ..	201	- 5	97	103
0.02	Puerperal Fever .. ..	10	+ 2	3	7
0.03	Other accidents and diseases of Pregnancy and Parturition .. ..	14	- 2	6	8
0.36	Congenital Debility and Malformation, including Premature Birth ..	178	- 20	89	89
0.38	Violent Deaths, excluding Suicide .. ..	186	- 10	95	90
0.13	Suicide .. ..	65	- +	34	30
2.39	Other Defined Diseases ..	1,170	+ 71	602	557
0.00	Diseases ill-defined or unknown .. ..	1	- 1	1	..
13.61	Totals .. ..	6,666	+234	3,140	3,479

Of the 6,666 deaths, 47 had no home.

## CAUSES OF, AND AGES AT DEATH DURING THE CALENDAR YEAR, 1936.

CAUSES OF DEATH.	Nett Deaths at the subjoined ages of " Residents " whether occurring within or without the District.									Total Deaths whether of " Residents " or " Non-Residents " in Institutions in the District
	ALL AGES.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
1. Enteric Fever .. ..	..	..	..	..	..	..	..	..	..	..
2. Small-pox .. ..	..	..	..	..	..	..	..	..	..	..
3. Measles .. ..	49	14	24	11	..	..	..	..	..	21
4. Scarlet Fever .. ..	12	1	1	2	6	2	..	..	..	11
5. Whooping Cough .. ..	28	18	7	3	..	..	..	..	..	13
6. Diphtheria .. ..	36	4	3	12	13	2	1	1	..	36
7. Influenza .. ..	64	1	..	..	..	1	6	21	35	6
8. Erysipelas .. ..	24	4	..	..	..	..	3	5	12	21
9. Pulmonary Tuberculosis ..	346	1	3	..	2	53	131	130	26	183
10. Other Tuberculous Diseases	62	4	2	10	8	13	13	12	..	64
11. Cancer, malignant disease	843	..	..	1	..	4	67	384	387	442
12. Rheumatic Fever .. ..	31	..	..	1	10	5	7	6	2	13
13. Meningitis .. ..	10	1	..	1	3	..	3	1	1	17
14. Cerebral Hæmorrhage, &c...	399	..	..	..	..	1	10	124	264	137
15. Organic Heart Disease ..	1,549	1	1	..	2	19	86	432	1,008	494
16. Arterio-sclerosis .. ..	518	..	..	..	..	..	..	89	429	299
17. Bronchitis .. ..	245	15	2	2	1	2	8	79	136	50
18. Pneumonia (all forms) ..	419	69	23	26	13	9	57	111	111	223
19. Other diseases of respiratory organs .. ..	75	3	..	1	1	1	9	32	28	51
20. Diarrhœa and Enteritis ..	89	65	6	..	..	..	7	4	7	76
21. Appendicitis and Typhlitis	30	..	..	..	5	5	5	12	3	40
22. Cirrhosis of Liver .. ..	12	..	..	..	..	..	..	8	4	6
23. Nephritis and Bright's Disease .. ..	201	..	1	..	1	8	20	80	91	103
24. Puerperal Fever .. ..	10	..	..	..	..	4	6	..	..	17
25. Other accidents and diseases of Pregnancy and Parturition .. ..	14	..	..	..	..	3	11	..	..	16
26. Congenital Debility and Malformation, including Premature Birth ..	178	176	..	..	1	..	1	..	..	148
27. Violent Deaths, excluding Suicide .. ..	186	10	3	8	16	18	26	29	76	180
28. Suicide .. ..	65	..	..	..	..	..	20	33	12	15
29. Other Defined Diseases ..	1,170	89	8	12	27	37	131	398	468	783
30. Diseases ill-defined or unknown .. ..	1	..	..	..	..	..	..	..	1	1
Totals .. ..	6,666	476	84	90	109	187	628	1,991	3,101	3,466

## DEATHS IN AGE GROUPS (NETT), 1926-1936.

Together with the percentage of the total deaths, represented by each group  
(in italics).

Year.	Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total.
1926	748 <i>12.3%</i>	206 <i>3.4%</i>	190 <i>3.1%</i>	158 <i>2.6%</i>	251 <i>4.1%</i>	676 <i>11.2%</i>	1,658 <i>27.4%</i>	2,175 <i>35.9%</i>	6,062
1927	629 <i>10.1%</i>	204 <i>3.3%</i>	160 <i>2.6%</i>	183 <i>3.0%</i>	246 <i>4.0%</i>	714 <i>11.5%</i>	1,711 <i>27.6%</i>	2,351 <i>37.9%</i>	6,198
1928	606 <i>9.9%</i>	122 <i>2.0%</i>	113 <i>1.8%</i>	155 <i>2.5%</i>	230 <i>3.8%</i>	725 <i>11.8%</i>	1,792 <i>29.2%</i>	2,390 <i>39.0%</i>	6,133
1929	722 <i>9.1%</i>	291 <i>3.7%</i>	258 <i>3.3%</i>	160 <i>2.0%</i>	349 <i>4.4%</i>	851 <i>10.8%</i>	2,113 <i>26.8%</i>	3,154 <i>39.9%</i>	7,898
1930	512 <i>8.6%</i>	84 <i>1.4%</i>	117 <i>2.0%</i>	156 <i>2.6%</i>	253 <i>4.3%</i>	667 <i>11.2%</i>	1,813 <i>30.6%</i>	2,328 <i>39.3%</i>	5,930
1931	552 <i>8.5%</i>	137 <i>2.1%</i>	154 <i>2.4%</i>	169 <i>2.6%</i>	275 <i>4.2%</i>	701 <i>10.8%</i>	1,902 <i>29.2%</i>	2,616 <i>40.2%</i>	6,506
1932	617 <i>9.5%</i>	109 <i>1.7%</i>	144 <i>2.2%</i>	155 <i>2.4%</i>	246 <i>3.8%</i>	659 <i>10.2%</i>	1,791 <i>27.7%</i>	2,748 <i>42.5%</i>	6,469
1933	537 <i>8.2%</i>	105 <i>1.6%</i>	130 <i>2.0%</i>	184 <i>2.8%</i>	285 <i>4.3%</i>	702 <i>10.7%</i>	1,825 <i>27.8%</i>	2,806 <i>42.7%</i>	6,574
1934	513 <i>8.2%</i>	104 <i>1.6%</i>	164 <i>2.6%</i>	205 <i>3.3%</i>	225 <i>3.6%</i>	653 <i>10.4%</i>	1,792 <i>28.5%</i>	2,635 <i>41.8%</i>	6,291
1935	463 <i>7.2%</i>	99 <i>1.5%</i>	91 <i>1.4%</i>	167 <i>2.6%</i>	198 <i>3.1%</i>	656 <i>10.2%</i>	1,805 <i>28.1%</i>	2,953 <i>45.9%</i>	6,432
1936	476 <i>7.1%</i>	84 <i>1.3%</i>	90 <i>1.4%</i>	109 <i>1.6%</i>	187 <i>2.8%</i>	628 <i>9.4%</i>	1,991 <i>29.9%</i>	3,101 <i>46.5%</i>	6,666

DEATHS FROM VEHICULAR TRAFFIC OF LEEDS PEOPLE IN AGE  
GROUPS, 1911-1936.

Year.	-5	5-15	15-25	25-45	45-65	65+	Totals.
1911	4	6	2	2	1	2	17
1912	2	3	2	3	2	2	14
1913	1	5	2	6	9	5	28
1914	1	2	4	4	7	7	25
1915	1	11	2	5	8	7	34
1916	2	4	2	3	10	6	27
1917	4	8	3	7	8	7	37
1918	3	4	3	2	11	6	29
1919	1	8	—	1	13	7	30
1920	—	3	6	8	5	5	27
1921	3	9	3	3	1	7	26
1922	3	10	2	5	8	2	30
1923	2	6	7	7	12	6	40
1924	5	9	6	5	7	7	39
1925	5	7	6	5	6	5	34
1926	6	12	7	8	17	12	62
1927	4	20	9	6	13	5	57
1928	2	10	6	14	14	12	58
1929	2	11	13	10	9	10	55
1930	8	12	9	8	19	19	75
1931	4	10	12	14	19	12	71
1932	6	10	10	15	18	19	78
1933	5	9	8	12	14	17	65
1934	8	9	14	15	30	15	91
1935	6	9	8	13	10	25	71
1936	5	7	10	7	9	16	54

## CREMATIONS IN LEEDS, 1905-1936.

Year.				No. of Leeds people cremated.	Nett total deaths in City.	Percentage of cremations on nett deaths (Leeds people cremated).
1905	..	..	..	7	7,047	0·10
1906	..	..	..	10	7,350	0·14
1907	..	..	..	12	7,167	0·17
1908	..	..	..	16	7,430	0·22
1909	..	..	..	9	6,806	0·13
1910	..	..	..	5	6,711	0·07
1911	..	..	..	7	7,331	0·10
1912	..	..	..	14	6,396	0·22
1913	..	..	..	7	7,237	0·10
1914	..	..	..	18	6,885	0·26
1915	..	..	..	13	7,609	0·17
1916	..	..	..	9	6,946	0·13
1917	..	..	..	10	7,052	0·14
1918	..	..	..	23	8,529	0·27
1919	..	..	..	18	6,992	0·26
1920	..	..	..	13	6,591	0·20
1921	..	..	..	9	6,285	0·14
1922	..	..	..	17	6,479	0·26
1923	..	..	..	11	5,986	0·18
1924	..	..	..	24	6,747	0·36
1925	..	..	..	26	6,037	0·43
1926	..	..	..	14	6,062	0·23
1927	..	..	..	32	6,198	0·52
1928	..	..	..	31	6,133	0·51
1929	..	..	..	36	7,898	0·46
1930	..	..	..	26	5,930	0·44
1931	..	..	..	54	6,506	0·83
1932	..	..	..	55	6,469	0·85
1933	..	..	..	66	6,574	1·00
1934	..	..	..	71	6,291	1·13
1935	..	..	..	96	6,432	1·49
1936	..	..	..	93	6,666	1·40
Total	..	..	..	852	216,772	0·39

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## Infectious and Other Diseases.

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**INFECTIOUS AND OTHER DISEASES**

BY

JAMES SHARPE, M.B., F.R.F.P.S., D.P.H.,

*Deputy Medical Officer of Health.*

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During the year 1936 the incidence of the common infectious diseases continued to fall, the only increases being in measles and puerperal fever including puerperal pyrexia. Among the non-infectious diseases cancer continued its upward trend.

The incidence and deaths from diphtheria are the lowest recorded since 1929. Notifications numbered 799 as compared with 1,335 in 1935. Deaths totalled 36 as against 60 in the previous year. With the cessation of the epidemic it has become increasingly difficult to persuade parents to have their children protected, despite the fact that of 40,304 children immunised during the last nine years, only 151 have contracted diphtheria—all of a mild form with no deaths.

Scarlet fever continued to be epidemic, 1,868 cases being notified as against 2,082 for the previous year, the deaths amounting to 12, as compared with 5 in 1935.

As expected, measles attained its maximum incidence in the thirteenth week of the year when 778 cases were notified. By the twenty-sixth week the epidemic had abated. In all, 8,744 cases were reported during the year, with 49 deaths.

There was a higher incidence both of puerperal fever and puerperal pyrexia, the numbers notified of these diseases being 76 and 107 respectively which compare unfavourably with 55 and 76 for the previous year. The deaths from puerperal fever likewise rose from 8 to 10. These increases are most regrettable and indicate the need for further care and vigilance on the part of those whose duty it is to attend women during pregnancy and parturition.

A complete summary of all cases of notifiable infectious diseases notified to this Department during 1936 will be found in the Appendix, table 2.



**Smallpox.**—No case of this disease was notified during 1936. This makes the fifth consecutive year in which the city has been entirely free from this disease.

*Contacts from Other Areas and Abroad.*—From other areas no notifications were received.

One contact from an infected ship was notified. She was kept under observation for twenty-one days but failed to show any signs of the disease.

*Cases referred for Second Opinion.*—During the year, 12 cases were referred to the Department as "doubtful smallpox" by general medical practitioners, as compared with 7 for the preceding year. The cases included chickenpox 10 : septic rash 1 : drug rash 1.

No case required hospital treatment.

*Vaccination.*—During 1935, the last year for which statistics are available, 7,745 births were registered, of which 3,517, or 45 per cent., were successfully vaccinated; 21 were found to be insusceptible to vaccination, and 3,010 statutory exemptions were issued on account of conscientious objections by parents or guardians.

The appended table shows the number of children vaccinated from year to year since the year 1925. The year 1927 was exceptional owing to the increased prevalence of smallpox in the city which gave vaccination a temporary fillip.

VACCINATION.

Year.	Number of children born.	Number of successful primary vaccinations during year.	Number granted exemption certificates during year.
1925	8,576	5,919	2,477
1926	8,515	6,045	2,348
1927	8,129	6,590	2,016
1928	7,978	5,828	2,387
1929	7,727	4,127	2,423
1930	7,902	4,275	2,558
1931	7,555	3,963	2,511
1932	7,369	3,692	2,635
1933	7,071	3,390	2,598
1934	7,693	3,669	2,930
1935	*7,745	3,517	3,010

\*Quite an appreciable number of these children may be vaccinated in 1936.

## DIPHTHERIA AND MEMBRANOUS CROUP.

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate. LEEDS.	Death-rate England and Wales.
1926	374	0·79	26	0·05	0·08
1927	439	0·92	28	0·06	0·07
1928	634	1·34	21	0·04	0·08
1929	536	1·12	26	0·05	0·09
1930	994	2·08	54	0·11	0·09
1931	995	2·05	86	0·18	0·07
1932	889	1·83	48	0·10	0·06
1933	1,057	2·18	88	0·18	0·07
1934	2,231	4·59	156	0·32	0·10
1935	1,335	2·74	60	0·12	0·09
1936	799	1·63	36	0·07	0·07

**Diphtheria.**—The number of cases notified during the year was 799, of which 784, or 98·1 per cent., were removed to hospital, as compared with 1,335 and 1,309 (98·1 per cent.) in 1935. The deaths numbered 36, giving a death-rate of 0·07 as compared with 60 deaths and a death rate of 0·12 last year. The comparative rates for England and Wales are 0·07 in 1936 and 0·08 in 1935.

Of the cases notified as diphtheria, 68 were found on admission to hospital to be suffering from other diseases although a throat swab had shown the germ of diphtheria to be present. These cases are regarded as carriers and have been excluded from the statistics.

*Diphtheria Immunisation.*—During the year, 1,938 children were immunised by medical officers of the Department in the course of the ordinary work of the immunisation clinic.

Material for immunisation was issued to general medical practitioners on request, and sufficient to immunise 212 children was distributed during 1936.

The appended table shows the number of children immunised since the inauguration of our scheme in the year 1928.

#### DIPHTHERIA IMMUNISATION IN LEEDS.

Year.	Immunised by Assistant Medical Officers, of the Health Department.	Immunised by General Medical Practitioners.	Total.
1928	65	27	92
1929	73	28	101
1930	152	22	174
1931	202	400	602
1932	1,379	495	1,874
1933	1,027	345	1,372
1934	2,217	556	2,773
1935	28,973	2,193	31,166
1936	1,938	212	2,150
Total	36,026	4,278	40,304

*Diphtheria in the Inoculated.*—Of the 40,304 children protected since 1928 or known to be immune, 97 lost their immunity and developed clinical diphtheria, or showed lesions from which the diphtheria bacilli were isolated. These included 14 who were Schick negative one or more months after a protective course. There were also 54 cases where the Schick test was not performed after inoculation, but diphtheria (sic) developed more than three months after the last injection. In 23 cases immunised children notified as suffering from diphtheria were found to have tonsillitis only.

Thus, 151 of the 40,304 children immunised or thought to be naturally immune during the last nine years have developed clinical diphtheria. In other words loss of immunity appears to have occurred in less than 4 cases out of every thousand immunised, surely a very satisfactory result and one which amply justifies the confidence placed in immunisation and the action of the Corporation in commending this method of protection to the public.

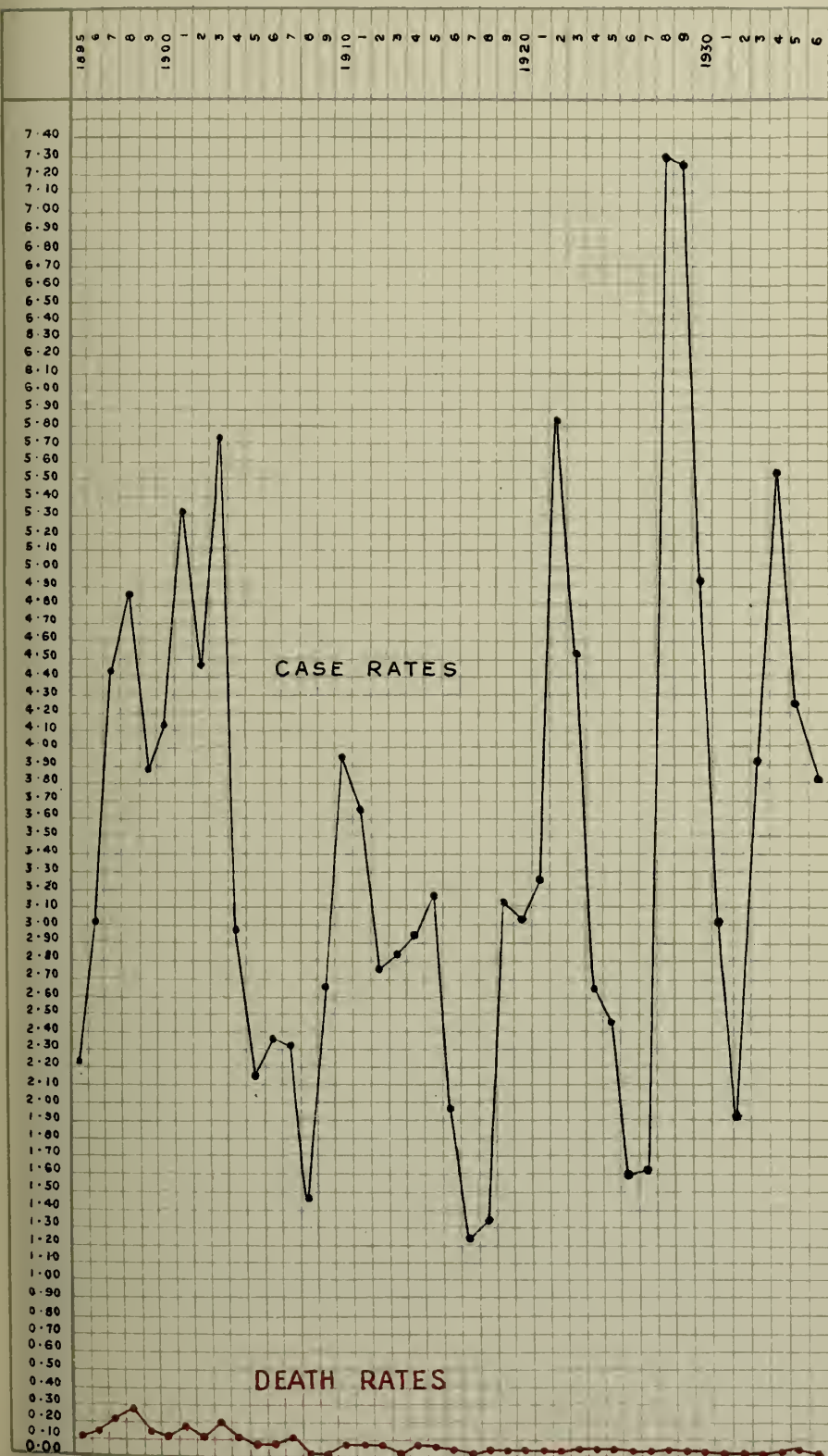
It can be justly claimed for immunisation that it protects without risk to the child, and at little cost to the community. But the measure of protection enjoyed by a community is the number of immune children under school age which should not be less than one-third of the total. At this age, nine out of every ten children appear to be susceptible and when they contract the disease the fatality rate is usually high. An immune infant population would mean an immediate and drastic reduction both in the number of cases and in the death-rate. It is for this we must strive.

*Institutional Outbreaks.*—During the year, 80 cases of diphtheria were notified from five institutions in the city. Of these, 8 were nurses and the remaining 72 patients.

In the majority, the disease was contracted during residence and occurred as single cases and not in groups.

*Diphtheria in Children under one month.*—During the year an outbreak of some importance occurred in the babies ward in one of the hospitals of the city. One baby died from broncho-pneumonia and it was noted that the child in the adjacent cot had slight snuffles. The following day the nasal discharge appeared to be of a dark brown colour. A swab was taken and organisms morphologically similar to the Klebs Loeffler bacillus were reported to be present. An officer of this Department investigated the circumstances, finding in all 10 babies, the youngest 6 days and the eldest 15 days old, as well as four nurses infected with the disease of the mild or "mitis" type. In one case only was the diagnosis of diphtheria apparent, that of a nurse whose left tonsil was deeply ulcerated. All the babies had blood-stained nasal discharge but no evidence of diphtheria apart from toxæmia. Two babies died of diphtheritic broncho-pneumonia and it is not unreasonable to assume that the first death was due to the same cause. During the year on four other occasions, in the same ward, 11 similar cases aged 6 days to 9 weeks, occurred. All recovered. Further reference to these children is made in the report of the Medical Superintendent, Seacroft Hospital, vide page 55.

# SCARLET FEVER CASE AND DEATH RATES 1895 - 1936.







## SCARLET FEVER.

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate. LEEDS.	Death-rate England and Wales.
1926	756	1·60	5	0·01	0·02
1927	773	1·62	6	0·01	0·01
1928	3,515	7·40	18	0·04	0·01
1929	3,473	7·26	29	0·06	0·02
1930	2,383	4·98	23	0·05	0·02
1931	1,467	3·02	12	0·02	0·01
1932	931	1·92	8	0·02	0·01
1933	1,906	3·93	9	0·02	0·02
1934	2,711	5·58	16	0·03	0·02
1935	2,082	4·27	5	0·01	0·01
1936	1,868	3·81	12	0·02	0·01

**Scarlet Fever.**—The number of cases of this disease reported during the year was 1,868, of which 1,718, or 92·0 per cent., were removed to hospital. There were 12 deaths equivalent to a death rate of 0·02.

The accommodation for scarlet fever cases at Seacroft Hospital was severely taxed in the first quarter of the year owing to the diphtheria epidemic. During the months of February and March it was necessary to give priority of admission to cases from institutions and over-crowded and unsuitable homes. The waiting list for admission to hospital never exceeded 10, and in no ordinary case was the admission delayed more than 48 hours.

*Outbreaks in Institutions.*—These numbered two with a total of 45 cases which included seven nurses.

*Return Cases.*—Of the 1,747 cases discharged from Seacroft Hospital during the year, 54 gave rise to return cases. This is equivalent to a rate of 3·09 per cent.



## ENTERIC FEVER.

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate. LEEDS.	Death-rate. England and Wales.
1926	9	0·02	1	0·00	0·01
1927	14	0·03	2	0·00	0·01
1928	6	0·01	1	0·00	0·01
1929	14	0·03	3	0·01	0·01
1930	4	0·01	2	0·00	0·01
1931	10	0·02	2	0·00	0·01
1932	9	0·02	..	..	0·01
1933	10	0·02	1	0·00	0·01
1934	8	0·02	1	0·00	0·00
1935	5	0·01	..	..	0·00
1936	4	0·01	..	..	0·01

**The Enteric Group.**—During the year 4 cases of enteric fever were notified, of which one was due to *B. Typhosus* and the remaining three to *B. para-typhosus* *B.* With the exception of one male of two years of age, all were females and their ages 18, 5, and 5 respectively. This is a decrease of one case as compared with the previous year. There were no deaths.

One case was found to be a regular contact of a known carrier in whose excreta, at a routine quarterly examination, *B. Typhosus* had been found five days prior to the child taking ill. Two of the cases were probably infected whilst residing outside the city. No likely source was ascertained in the fourth case.

*Enteric Fever carriers.*—In the reports for the years 1934 and 1935 mention was made of a girl, now aged 20, and a woman aged 51 who were chronic carriers. During 1936, examination of the *fæces* and urine of the woman, and of the *fæces* of the girl, were carried out on four occasions, with positive results on each occasion. Both have been warned of the danger of spreading the infection and instructed regarding personal cleanliness. They are still under observation.

## MEASLES (EXCLUDING GERMAN MEASLES).

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate LEEDS.	Death-rate England and Wales.
1922	9,932	21·28	152	0·33	0·15
1923	4,683	9·97	50	0·11	0·14
1924	6,654	14·11	46	0·10	0·12
1925	5,100	10·78	39	0·08	0·14
1926	7,076	14·95	19	0·04	0·09
1927	8,569	17·94	117	0·24	0·09
1928	3,638	7·66	21	0·04	0·11
1929	9,486	19·82	102	0·21	0·09
1930	913	1·91	2	0·00	0·11
1931	10,955	22·52	56	0·12	0·08
1932	3,540	7·30	52	0·11	0·08
1933	3,973	8·19	22	0·05	0·05
1934	10,576	21·75	90	0·19	0·09
1935	1,341	2·75	4	0·01	0·03
1936	8,744	17·85	49	0·10	0·07

## GERMAN MEASLES.

Year.	Cases notified.	Case-rate.	Deaths LEEDS.	Deaths in England and Wales.
1922 ..	146	0·31	..	15
1923 ..	541	1·15	..	17
1924 ..	383	0·81	..	12
1925 ..	201	0·43	..	42
1926 ..	626	1·32	1	35
1927 ..	95	0·20	..	20
1928 ..	41	0·09	..	12
1929 ..	1,256	2·62	..	31
1930 ..	343	0·72	..	27
1931 ..	101	0·21	..	16
1932 ..	86	0·18	..	7
1933 ..	119	0·25	..	11
1934 ..	2,495	5·13	..	8
1935 ..	501	1·03	..	11
1936 ..	427	0·87	1	

**Measles.**—An epidemic of this disease occurred during the year and 8,744 cases were notified. There were 49 deaths giving a death-rate of 0.10.

The epidemic commenced at the end of January and during the first and second quarters over 8,382 cases were reported. The incidence fell rapidly at the beginning of June and only 304 and 104 cases were reported during the third and fourth quarters respectively.

The deaths from measles were four times those from scarlet fever and as many as those from scarlet fever and diphtheria put together which goes to show how important a disease measles is. By contrast scarlet fever is of much less moment yet in the public esteem it still retains its traditional reputation of being a dangerous disorder necessitating removal to hospital and all the elaborate ritual associated with the administration of infectious diseases in this country. A change of values is necessary and both the public and the profession have to be made to realise that measles and not scarlet fever is the bane of childhood and calls for a more generous provision both of hospital beds and of facilities for proper home nursing where that is lacking.

**German Measles.**—There were 427 cases of this disease notified during the year, of which 180 occurred in the first quarter and 160 in the second quarter.

**Whooping Cough.**—This disease is not notifiable in Leeds so that the actual number of cases occurring in the city cannot be ascertained. It is gratifying to note, however, that the number of deaths, 28, was 20 less than the figure for the preceding year, when 48 deaths were recorded. The death-rate was 0.06 compared with 0.10 for the year 1935.

**Erysipelas.**—There was a slight decrease in the notifications of this disease during the year, 291 cases being notified as compared with 301 reported during the previous year. The deaths numbered 24, which gives a death-rate of 0.05. Of the 291 cases reported, 151 received hospital treatment.

### WHOOPING COUGH.

Year.	Deaths.	Death-rate. LEEDS.	Death-rate England and Wales.
1926	119	0·25	0·11
1927	44	0·09	0·09
1928	36	0·08	0·08
1929	107	0·22	0·16
1930	32	0·07	0·05
1931	43	0·09	0·06
1932	41	0·08	0·07
1933	28	0·06	0·06
1934	25	0·05	0·05
1935	48	0·10	0·04
1936	28	0·06	0·05

### AGES AT DEATH FROM WHOOPING COUGH.

1936	0-1	1-2	2-3	3-4	4-5	5-10	10-15	Total.
No. of deaths	18	7	3	..	..	..	..	28

## ERYSIPELAS.

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate Leeds.	Death-rate England and Wales.
1926	327	0·69	12	0·03	0·02
1927	320	0·67	18	0·04	0·02
1928	361	0·76	19	0·04	0·02
1929	349	0·73	19	0·04	0·03
1930	423	0·88	23	0·05	0·03
1931	317	0·65	22	0·05	0·03
1932	289	0·60	22	0·05	0·02
1933	353	0·73	15	0·03	0·03
1934	418	0·86	28	0·06	0·04
1935	301	0·62	23	0·05	0·03
1936	291	0·59	24	0·05	

**Encephalitis Lethargica.**—No case of this disease was reported during 1936. There were 10 deaths.

**Malaria.**—No case of this disease was notified during the year.

**Dysentery.**—No case of this disease occurred during the year.

**Acute Anterior Poliomyelitis.**—Six cases of this disease were notified during 1936. There were no deaths.

**Cerebro Spinal Meningitis.**—There was a decrease in the number of cases of this disease, 21 being reported as compared with 35 in 1935. Three cases were admitted to hospital. There were 21 deaths, equivalent to a death-rate of 0·04.

**Puerperal Fever and Puerperal Pyrexia.**—The figures for the year are given below, viz. :—

Disease.	Cases notified.		Case-rate per 1,000 population		Deaths.		Death-rate per 1,000. population	
	1935	1936	1935	1936	1935	1936	1935	1936
Puerperal Fever ..	55	76	0·11	0·16	8	10	0·02	0·02
Puerperal Pyrexia ..	76	107	0·16	0·22	..	..	..	..

Of the 76 cases of puerperal fever, 51 (67·1 per cent.) occurred in institutions, 16 (21·1 per cent.) in doctors' practices, and 9 (11·8 per cent.) in the practice of midwives. Eight (10·5 per cent.) were removed to Seacroft Hospital.

The cases of puerperal pyrexia were distributed as follows :—96 (89·7 per cent.) in institutions, 5 (4·7 per cent.) in doctors' practices, and 6 (5·6 per cent.) in midwives' practices.

This subject is further dealt with in the section on Maternity and Child Welfare on page 155.

**Ophthalmia Neonatorum.**—Fifty-nine cases of this disease were reported during the year, an increase of one case as compared with the previous year.

#### DAY OF ONSET FROM BIRTH.

1936.	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	10th-15th	15th-20th	20th-25th
No. of Cases	2	1	2	1	4	1	2	5	6	5	16	8	6

The results of the treatment were as follows :—

Recovery apparently perfect .. ..	58
Sight of both eyes affected .. ..	—
Sight of one eye affected .. ..	1
(no sight in left eye)	
Still under treatment .. ..	—

This subject is further dealt with in the section on Maternity and Child Welfare on page 155.

## PUERPERAL FEVER.

Year.	Cases.	Case-rate per 1,000 population.	Deaths.	Death-rate per 1,000 live births.	Death-rate per 1,000 population.
1900	21	0.05	13	0.99	0.03
1901	26	0.06	16	1.24	0.04
1902	21	0.05	12	0.91	0.03
1903	26	0.06	10	0.77	0.02
1904	26	0.06	11	0.88	0.03
1905	28	0.06	9	0.73	0.02
1906	30	0.07	14	1.16	0.03
1907	30	0.07	15	1.28	0.03
1908	24	0.05	13	1.08	0.03
1909	32	0.07	19	1.73	0.04
1910	29	0.07	14	1.29	0.03
1911	23	0.05	13	1.23	0.03
1912	31	0.07	9	0.87	0.02
1913	32	0.07	13	1.20	0.03
1914	46	0.10	27	2.53	0.06
1915	23	0.05	12	1.21	0.03
1916	28	0.06	12	1.27	0.03
1917	22	0.05	5	0.66	0.01
1918	17	0.04	6	0.81	0.01
1919	26	0.06	6	0.79	0.01
1920	56	0.12	29	2.58	0.06
1921	31	0.07	8	0.79	0.02
1922	35	0.07	14	1.51	0.03
1923	51	0.11	10	1.15	0.02
1924	53	0.11	9	1.05	0.02
1925	52	0.11	24	2.93	0.05
1926	46	0.10	14	1.74	0.03
1927	37	0.08	14	1.80	0.03
1928	47	0.10	14	1.83	0.03
1929	31	0.06	10	1.35	0.02
1930	51	0.11	10	1.32	0.02
1931	65	0.13	17	2.35	0.03
1932	28	0.06	8	1.14	0.02
1933	39	0.08	15	2.26	0.03
1934	53	0.11	15	2.09	0.03
1935	55	0.11	8	1.11	0.02
1936	76	0.16	10	1.36	0.02



## INFLUENZA.

Year.	Deaths.	Death-Rate. LEEDS.	Death-Rate England and Wales.
1926	100	0·21	0·23
1927	173	0·36	0·57
1928	100	0·21	0·20
1929	568	1·19	0·74
1930	59	0·12	0·13
1931	125	0·26	0·36
1932	116	0·24	0·33
1933	258	0·53	0·57
1934	33	0·07	0·14
1935	102	0·21	0·18
1936	64	0·13	0·14

## AGES AT DEATH FROM INFLUENZA.

1936	0-1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total.
No. of Deaths	1	..	..	..	1	6	21	35	64

**Influenza.**—There were 64 deaths from this disease during the year giving a death-rate of 0·13 as compared with 102 deaths and a death-rate of 0·21 in 1935. With the exception of the year 1934, when the deaths numbered only 33, this year's figure of 64 is the lowest recorded since the year 1930. Most of the deaths (87·5 per cent.) occurred in the age group 45+.

DEATHS FROM DIARRHŒA AND ENTERITIS UNDER TWO YEARS AND METEOROLOGICAL CONDITIONS  
IN EACH MONTH OF THE YEAR.

1936.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Deaths .. ..	1	2	7	5	7	5	4	4	3	24	4	5	71
Barom. (inches) ..	29.35	29.68	29.74	29.85	29.94	29.90	29.66	30.00	29.95	30.11	29.74	29.83	29.81
Attached Ther. °F. . .	57.29	55.12	58.62	58.56	61.85	65.00	66.72	67.10	64.97	61.67	57.88	57.27	61.01
Dry Bulb .. ..	42.34	36.63	46.29	48.53	55.85	61.60	62.75	64.23	60.25	53.06	45.08	45.28	51.85
Wet Bulb .. ..	40.37	34.90	43.96	44.97	52.12	58.75	59.78	60.12	56.75	50.00	42.94	43.08	48.99
Humidity .. ..	84.06	82.50	83.40	76.28	72.94	82.58	82.83	77.25	79.58	80.31	83.98	83.45	80.81
Mn. of highest reading ..	46.31	41.07	51.29	53.97	63.18	67.79	68.77	71.68	66.09	57.54	49.64	49.57	57.21
.. lowest ..	35.77	30.39	37.79	38.00	44.82	51.54	54.40	54.61	52.14	43.57	38.39	37.77	43.30
.. daily range ..	10.54	10.68	13.50	15.97	18.36	16.25	14.37	17.07	13.94	13.96	11.25	11.80	13.91
Total rainfall (inches) ..	4.21	2.97	2.03	1.66	2.48	3.61	4.10	1.43	1.96	2.05	3.07	1.67	31.24
Sunshine (hours) ..	30.50	57.33	43.50	152.92	157.42	164.17	136.75	165.42	77.33	80.75	34.00	33.58	1,142.67

The meteorological data are compiled from returns sent us by Mr. Ricketts, the Curator of the Museum.

They are uncorrected readings, made at 10 a.m. and 4 p.m.

**DIARRHŒA AND ENTERITIS DEATHS UNDER TWO YEARS  
WITH RATES PER 1,000 BIRTHS.**

Year.	Deaths.	Rate per 1,000 Births.	
		Leeds.	England and Wales.
1926	147	18.2	9.2
1927	88	11.3	6.7
1928	105	13.7	7.2
1929	86	11.6	8.3
1930	34	4.5	6.2
1931	68	9.4	5.9
1932	106	15.1	6.6
1933	104	15.7	7.0
1934	76	10.6	5.4
1935	62	8.6	5.6
1936	71	9.7	5.9

**Epidemic (Summer) Diarrhœa and Enteritis.**—During the year 71 children under two years of age died from these diseases, equal to a death-rate of 9.7 per 1,000 births, as compared with 8.6 during the previous year.

**Pneumonia.**—There were 736 notifications of pneumonia received during the year, of which 645 were primary and 91 influenzal. The attack-rates for the two varieties of pneumonia based on the notifications received were 1.32 and 0.19 respectively, as compared with 1.38 and 0.20 for the previous year, and an average of 1.54 and 0.25 for the previous five years.

The subjoined table gives the incidence of these two types of pneumonia in each quarter of the year.

## PNEUMONIA CASES NOTIFIED.

1936.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.
Acute Primary Pneumonia ..	236	157	111	141	645
Acute Influenzal Pneumonia ..	33	21	8	29	91

## PNEUMONIA (ALL FORMS).

Year.	Deaths.	Death-Rate. LEEDS.	Death-Rate England and Wales.
1926	484	1.02	0.83
1927	477	1.00	0.95
1928	485	1.02	0.79
1929	825	1.72	1.11
1930	413	0.86	0.70
1931	500	1.03	0.84
1932	497	1.02	0.74
1933	485	1.00	0.74
1934	378	0.78	0.71
1935	374	0.77	0.66
1936	419	0.86	

## AGES AT DEATH FROM PNEUMONIA.

1936	0-1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total
No. of Deaths	69	23	26	13	9	57	111	111	419

It will be seen that over 60 per cent. of the cases of acute primary pneumonia occurred in the first two quarters of the year.

The number of deaths which occurred from all forms of pneumonia during the year was 419, which represents a death-rate of 0.86.

#### BRONCHITIS.

Year.	Deaths.	Death-Rate. LEEDS.	Death-Rate England and Wales.
1926	439	0.93	0.77
1927	351	0.73	0.84
1928	343	0.72	0.59
1929	559	1.17	0.84
1930	278	0.58	0.49
1931	355	0.73	0.63
1932	299	0.62	0.51
1933	342	0.71	0.52
1934	224	0.46	0.42
1935	230	0.47	0.39
1936	245	0.50	

#### AGES AT DEATH FROM BRONCHITIS.

1936	0-1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total.
No. of Deaths	15	2	2	1	2	8	79	136	245

**Bronchitis.**—The number of deaths from bronchitis registered during the year was 245 giving a death-rate of 0.50 as compared with 230 and a death-rate of 0.47 for 1935. As usual, more than half the deaths occurred in the age group 65 and over. The close association between the mortality from pneumonia and bronchitis was maintained.

#### CANCER.

Year.	Deaths.	Death-Rate. LEEDS.	Death-Rate England and Wales.
1926	657	1.39	1.36
1927	649	1.36	1.38
1928	698	1.47	1.43
1929	684	1.43	1.44
1930	728	1.52	1.45
1931	740	1.52	1.48
1932	760	1.57	1.51
1933	706	1.46	1.53
1934	801	1.65	1.56
1935	803	1.65	1.59
1936	843	1.72	1.63

#### AGES AT DEATH FROM CANCER.

1936.	0-1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total.
Males	..	..	..	..	1	22	185	213	421
Females	..	..	1	..	3	45	199	174	422
Total	..	..	1	..	4	67	384	387	843



Ward.	Buccal cavity and pharynx.		Digestive organs and peritoneum.		Respiratory organs.		Uterus.		Female genital organs.		Breast.		Male genito-urinary organs.		Skin.		Other or unspecified organs.		Totals.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Mill Hill and South..	..	1	4	3	..	1	..	1	1	..	..	3	1	..	..	..	1	..	7	9
Westfield ..	..	1	10	8	..	5	6	5	1	..	..	1	1	..	..	..	1	5	18	22
Blenheim ..	..	..	15	14	..	3	4	3	3	..	..	3	7	..	..	..	3	3	29	26
Central ..	2	..	8	9	4	2	4	4	..	..	..	5	1	..	1	..	2	1	18	21
Woodhouse ..	..	2	9	9	3	2	5	5	4	..	..	5	..	..	..	..	1	1	15	26
North ..	..	1	10	12	4	1	1	1	..	..	..	4	3	..	..	..	2	2	18	21
Far Headingley ..	..	..	7	8	2	1	..	..	1	..	..	6	3	..	1	..	1	3	13	19
Hyde Park ..	..	1	10	10	..	3	..	3	..	..	..	3	1	..	1	..	1	1	12	20
Kirkstall ..	2	1	8	7	2	..	4	4	2	..	..	4	3	..	..	..	1	..	16	18
Burmantofts ..	5	..	6	5	5	1	3	3	..	..	..	3	2	..	1	..	1	2	19	15
Harehills ..	..	4	15	11	4	1	4	4	..	..	..	6	3	1	..	..	2	1	29	23
Potternewton ..	..	1	13	4	..	1	5	5	1	..	..	5	2	..	..	..	1	..	17	16
Roundhay ..	..	1	9	8	2	..	1	1	1	..	..	2	2	..	..	..	2	..	16	12
Cross Gates & Templenewsam	..	..	9	6	3	..	..	1	1	..	..	1	..	..	..	..	2	..	14	9
Richmond Hill ..	..	1	11	6	3	2	7	7	..	..	..	..	..	..	..	..	1	..	16	15
Osmondthorpe ..	..	1	11	10	2	1	2	2	..	..	1	..	3	..	..	..	2	1	20	14
East Hunslet ..	..	1	10	11	2	..	3	3	..	..	..	3	1	..	..	..	..	..	13	18
Hunslet Carr and Middleton	..	..	11	9	..	..	3	3	3	..	..	5	..	..	..	..	..	3	11	23
West Hunslet ..	..	1	8	5	5	1	1	1	..	..	..	2	..	..	..	..	2	1	16	10
Beeston ..	..	1	9	5	2	..	..	2	..	..	..	3	2	..	..	..	..	1	14	10
Holbeck (South) ..	..	1	8	5	..	..	1	1	1	..	..	5	1	..	..	..	2	..	12	13
Holbeck (North) ..	..	1	10	6	4	1	1	1	..	..	..	1	..	..	..	..	2	1	17	9
Armley and New Wortley	..	..	5	6	2	1	..	..	..	..	..	1	2	..	..	..	..	..	9	9
Upper Armley ..	1	..	10	3	2	..	3	3	2	..	..	2	..	..	..	..	..	..	13	10
Bramley ..	4	..	12	5	1	..	5	4	4	..	..	2	1	..	..	..	2	..	20	16
Farnley and Wortley ..	3	..	10	8	3	..	2	2	2	..	..	5	1	..	..	..	2	1	19	18
1936—City ..	33	6	248	193	65	16	71	80	27	2	1	80	40	2	2	2	32	27	421	422
1935—City ..	31	2	223	200	72	22	69	61	23	1	..	61	36	1	5	33	25	33	388	415

**Cancer.**—The number of deaths due to this disease registered during 1936 was the highest ever recorded in the history of the city, namely 843. Of these, 421 were males and 422 females, an increase of 33 males and 7 females as compared with the previous year.

Cancer of the digestive system accounted for 25 more deaths in males but 7 fewer deaths in females than last year. Deaths from cancer of the respiratory organs show a fall of 13 namely 7 males and 6 females. Mammary cancer accounted for 19 and uterine cancer for 2 more deaths in women than last year.

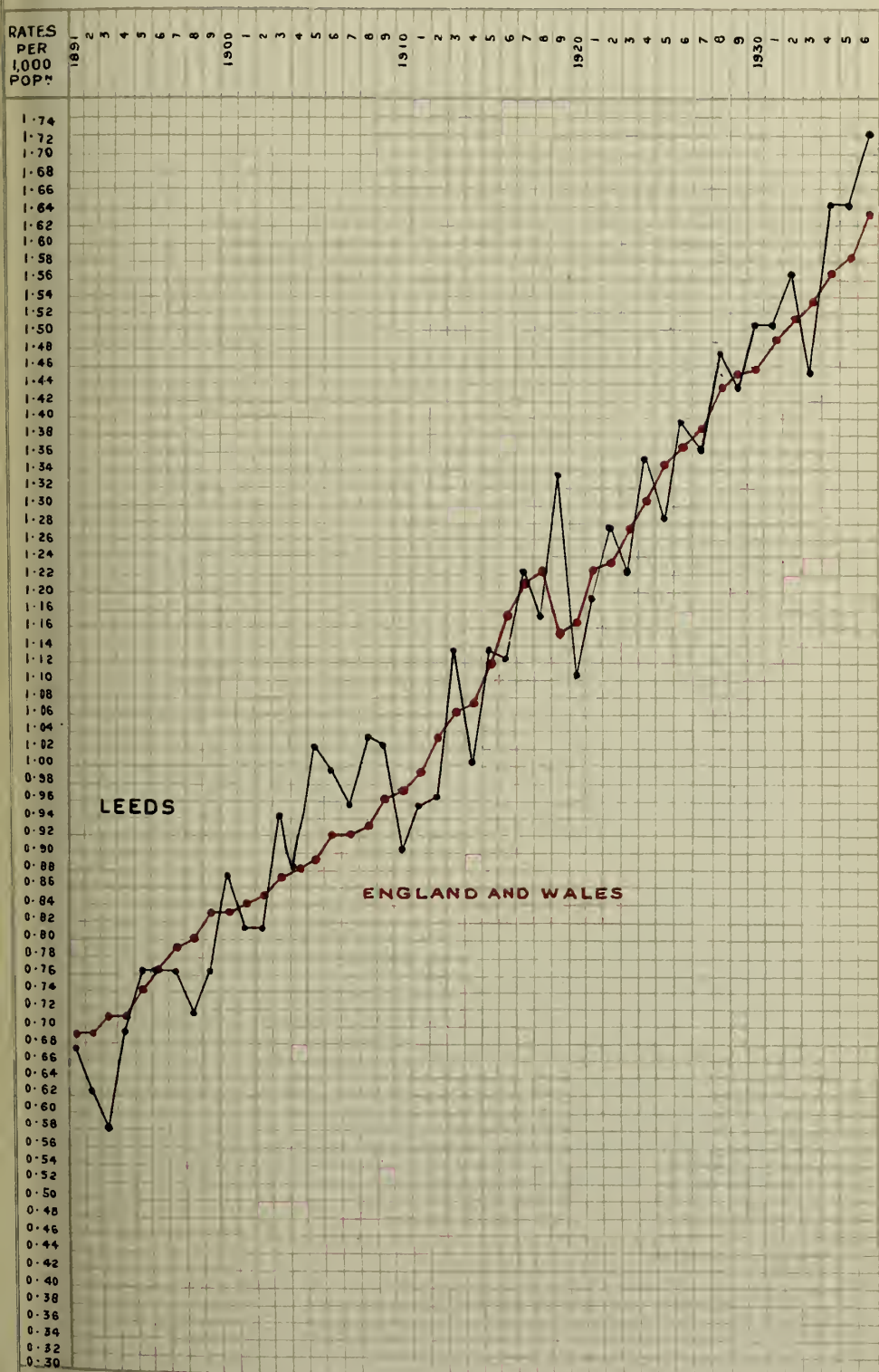
A special report on cancer was sent to the Ministry of Health on 15th January, 1937.

#### CANCER DEATH-RATES, ELEVEN LARGE TOWNS, ALSO ENGLAND AND WALES.

	Year 1925.	Year 1926.	Year 1927.	Year 1928.	Year 1929.	Year 1930.	Year 1931.	Year 1932.	Year 1933.	Year 1934.	Year 1935.
London ..	1.44	1.46	1.49	1.52	1.55	1.57	1.64	1.61	1.65	1.72	1.69
Birmingham..	1.29	1.31	1.39	1.37	1.37	1.42	1.45	1.47	1.44	1.47	1.55
Liverpool ..	1.21	1.18	1.16	1.33	1.34	1.27	1.34	1.40	1.47	1.53	1.56
Manchester ..	1.40	1.49	1.45	1.49	1.56	1.52	1.63	1.69	1.57	1.69	1.79
Sheffield ..	1.33	1.19	1.39	1.37	1.42	1.45	1.44	1.33	1.51	1.53	1.54
Leeds ..	1.28	1.41	1.37	1.46	1.44	1.52	1.53	1.58	1.48	1.64	1.65
Bristol ..	1.32	1.26	1.43	1.45	1.39	1.50	1.49	1.54	1.45	1.58	1.66
Hull ..	1.20	1.46	1.45	1.47	1.40	1.36	1.28	1.45	1.33	1.50	1.54
Bradford ..	1.42	1.63	1.59	1.55	1.58	1.61	1.68	1.71	1.76	1.64	1.90
Newcastle ..	1.32	1.19	1.20	1.54	1.38	1.39	1.30	1.45	1.44	1.57	1.53
Nottingham ..	1.25	1.38	1.49	1.44	1.52	1.43	1.51	1.44	1.35	1.47	1.46
England and Wales ..	1.34	1.36	1.38	1.42	1.44	1.45	1.48	1.51	1.53	1.56	1.59

The rates are calculated from figures given in the Registrar General's Annual Reports.

# CANCER DEATH RATE.— 1891-1936.





**Food Poisoning.**—At the beginning of September a medical practitioner reported five cases of suspected food poisoning in two separate households. On investigation, it was ascertained that all five patients had been taken ill with severe abdominal pain, vomiting and diarrhoea, from two to three hours after eating pickled herrings purchased from the same retail shop. It appears that the herrings were supplied by a Scottish firm to a wholesale merchant in the Leeds Market, who sent the fish to several retail shops in the Leeds district. In six of the shops visited, the retailer said that he had had several complaints from his customers. All these persons were visited and thirty-seven cases of illness similar to the above were discovered in fifteen separate households.

In addition, two cases of suspected food poisoning were reported from a large general hospital in the city. These patients resided in a small adjoining Borough, whose Medical Officer of Health found that both patients had eaten pickled herrings from a local store who, in turn, received their supplies from the same wholesale merchant in the Leeds Market.

In all, 44 people in 19 separate households were affected.

The facts were reported to the Medical Officer of Health of the Scottish town where the suspected herrings were prepared, and after a thorough investigation the conclusion arrived at was that these illnesses were due to the pickled herrings having been packed whilst hot in un-ventilated cardboard containers. The epidemic ceased immediately the herrings were withdrawn from sale.

Samples of the herrings were submitted for bacteriological and chemical examination. No organisms of the salmonella (food poisoning) group were isolated from the material. Anthracoid bacilli, *B. proteus* and some staphylococcal forms were found to be present and may have played a part in rendering the food unwholesome. The chemical examination was negative.

In addition, there were three other notifications of alleged food poisoning. On investigation, no pathogenic organisms of the food poison group were detected after bacteriological examination of the suspected articles of food had been carried out in all three cases.

**Anthrax.**—In April a case of anthrax was removed to Seacroft Hospital from a large general hospital in the city. The patient, a man aged 31, was engaged at a local tannery. Notification was immediately sent to the Inspector of Factories. In connection with this case four barrels, each of a capacity of 40 gallons, of semi-liquid anthrax-infected manure were cremated at a Corporation destructor under the supervision of this Department.

**Handling of Food, etc., by Infected Persons.**—It was not found necessary to exercise the powers conferred by Section 42 of the Leeds Corporation Act, 1930, during the year under review.



## AMBULANCE WORK AND DISINFECTION.

**Ambulance Work.**—During the year under review 3,615 cases were removed by the ambulances to Seacroft Hospital, Killingbeck Sanatorium and other hospitals or lying-in institutions. Over and above these, 462 other journeys were made for the transference of patients from one institution to another or for returning patients home on discharge from hospital.

The following are details of the cases removed to hospital by the ambulances, viz. :—

Smallpox .. .. .	—
Scarlet Fever .. .. .	1,781
Diphtheria .. .. .	973
Typhoid .. .. .	5
Measles .. .. .	123
Tuberculosis .. .. .	275
Other Diseases .. .. .	260
Maternity .. .. .	1,198
<b>TOTAL .. .. .</b>	<b>3,615</b>

(As compared with 5,240 in 1935).

The total mileage run by the ambulances was 52,521, compared with 50,901 during 1935.

There are now four ambulances for infectious diseases, one for maternity cases and four bedding vans.

**Disinfection.**—The following work was done by the disinfecting staff, viz. :—

Houses disinfected .. .. .	3,318
Rooms .. .. .	6,209
Beds and Mattresses .. .. .	4,266
Articles of bed linen .. .. .	35,161
Articles of clothing .. .. .	35,418
Other articles .. .. .	5,118

Disinfectant baths were provided and disinfection of clothing carried out in respect of 643 infectious disease contacts.

The total mileage run by the disinfection and bedding vans was 24,844.

**Verminous Persons.**—The number of verminous persons dealt with at the cleansing station was 720, while 520 rooms, 44 houses, and 13,894 articles of clothing and bedding were disinfested.



**Disinfestation.**—The following table shows the work done during the year at the Disinfesting Station, Stanley Road.

## HCN. FUMIGATION.

1. Number of articles fumigated .. ..	125,315
2. „ „ „ disinfected by steam ..	46,502
3. „ „ houses dealt with.. ..	2,613
4. Number of personal disinfestations :—	
(a) Adults .. .. .	..
(b) Children .. .. .	..
5. Furniture supplied on loan :—	
(a) No. of articles .. .. .	2,433
(b) No. of houses .. .. .	752
6. Refusal to allow fumigation :—	
(a) Objection to fumigation .. ..	1
(b) Other reasons .. .. .	1
7. Number of articles destroyed .. ..	430
8. Claims for damage or loss :—	
(a) Claims not accepted .. .. .	10
(b) Claims accepted .. .. .	30
(c) Cost .. .. .	£24 14s. 4d.
(d) Damage due to fire in container ..	£54 19s. 4d.
9. Work in connection with house fumigation :—	
(a) No. of articles disinfected by steam ..	11,379
(b) No. of houses .. .. .	519
10. Work undertaken for other authorities :—	
(a) No. of articles fumigated .. ..	797
(b) No. of articles steam disinfected ..	430
(c) No. of houses .. .. .	17
11. Work undertaken by private contractors for the Corporation (included in figures under items 1, 2 and 3 :—	
(a) No. of articles fumigated .. ..	6,545
(b) No. of articles steam disinfected ..	3,363
(c) No. of houses .. .. .	199

This subject is referred to on pages 247 and 268.

## BACTERIOLOGICAL WORK.

The following is a complete summary of the work done for the Health Department by the Department of Pathology and Bacteriology in the Leeds University Medical School, under the supervision of Professor James W. McLeod, the City Bacteriologist.

### GENERAL.

Nature of pathological or bacteriological investigation.	Number of specimens.
Diphtheria—	
Swabs for Kleb Loeffler bacillus .. .. .	3,659
Virulence Tests .. .. .	..
Scarlet—	
Swabs for haemolytic streptococci .. .. .	93
Tuberculosis—	
Sputum for tubercle bacillus .. .. .	1,594
Sputum for tubercle bacillus (concentration tests) ..	11
Typhoid—	
Faeces and urine for typhoid group of organisms ..	52
Agglutination (Widal) Test for typhoid group ..	25
Other—	
Sputum for organisms .. .. .	17
Chest fluid for organisms .. .. .	3
Pus for organisms .. .. .	8
Urine for organisms, cells, and T.B. .. .. .	29
Blood for organisms .. .. .	11
Guinea Pig Inoculations—	
Pathological Fluids .. .. .	7
Milk for guinea pig inoculation .. .. .	149
Food Investigations—	
Milk for bacterial count .. .. .	..
Foodstuffs for bacteriological examination .. ..	30
Water Investigations—	
Water bacteriological examinations .. .. .	61
Miscellaneous Examinations—	
Throat swabs for organisms .. .. .	3
Faeces for organisms .. .. .	6
Cerebro-spinal fluid .. .. .	5
Other examinations .. .. .	66
Total .. .. .	5,829

**LEEDS CITY HOSPITAL**

(Seacroft).

**REPORT FOR THE YEAR ENDING****31st DECEMBER, 1936.**

BY

E. C. BENN, M.B., Ch.B., D.P.H.,

*Medical Superintendent.*

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**Admissions.**—The number of patients admitted to Seacroft Hospital during the year was 3,181, as compared with 3,795 in 1935. The diminution in the total number of admissions was due to the lower incidence of diphtheria. The number of patients suffering from this disease reached a peak in 1934, but now the figures compare more favourably with those of pre-epidemic years.

The daily average number of patients in Hospital during 1936 was 293·3 as compared with 327·5 in 1935. The greatest number of patients in Hospital at any one time was 400 and this figure was reached during the month of March, and the smallest number was 198 in the month of September. The average number of days' stay in hospital of the 3,225 patients who completed treatment during the year was 34·9. The comparative figure for 1935 was 32 days, and the increase of 2·9 days was due to the decreased pressure on hospital beds caused by the fall in the number of patients admitted. This permitted a slight prolongation of hospital treatment in those patients who would receive some benefit by it.

The number of deaths which occurred in the hospital from all causes during the year was 79, and this gives a mortality of 2·4 per cent., as compared with 2·22 per cent. in 1935 and 3·9 per cent. in 1934.

The number of direct admissions from outside the city boundaries was 14. The various notifications and the districts from which they were admitted are shown below.

Puerperal fever	..	Dewsbury	..	..	6
		Pudsey	..	..	1
		West Riding	..	..	2
Enteric fever	..	Dewsbury	..	..	2
Cerebro-spinal fever		Dewsbury	..	..	1
		Morley	..	..	1
Diphtheria carrier	..	Garforth Isolation			
		Hospital.			1
					—
		Total	..	..	14
					==

During the year 331 patients were admitted from various hospitals and other institutions in the city.

**Extensions and Alterations to the Hospital.**—An additional staff dining-room with accommodadion for 80 persons and a floor space of 50 feet by 25 feet was commenced during 1936 and is nearing completion. When it is available for use it will provide a most necessary addition to the present overcrowded dining-rooms and will greatly assist in the administration of the hospital.

The male servants' quarters, which had for the most part become redundant, were completely renovated, redecorated and refurnished to provide additional nurses bedrooms, and buildings adjacent to the laundry were altered and re-equipped to form dining-room, rest-room and cloak room for female outworkers.

Isolation accommodation is at present much below the requirements of the hospital and its absence is one of the chief difficulties to be met with in the administration of the institution. It is hoped that before long action will be taken to meet this most pressing need.

**Smallpox Hospital.**—No cases of smallpox were treated during the year.

**Quarantine Cottages.**—No patients were admitted during 1936.

**Meteorological Records.**—These continue to be kept and are summarised on pages 67 and 70. At the request of the Air Ministry records are being made during the winter months of visibility and the presence of mist and fog.

**Diphtheria.**—The number of patients admitted during 1936 in whom the notified diagnosis of diphtheria was confirmed was 852, as compared with 1,309 in 1935 and 2,201 in 1934. The number discharged on completion of treatment was 809 in respect of whom the average stay in hospital was 44·7 days.

**Death-Rate.**—Deaths attributed in part or in whole to diphtheria numbered 31, and this gives a death-rate of 3·7 per cent. which is exactly the same as that for the previous year. The corresponding figures for the years 1934 and 1933 were 7·4 per cent. and 8·7 per cent. respectively.

**Type of the Disease.**—Although cases of a toxic nature were not seen infrequently, the usual type of infection appeared to be milder than that which was present in the city in the year 1935 and the years immediately preceding. The gravis type of organism still predominated but the incidence of this type of infection appeared to be falling.

**Forms of the Disease.**—The patients who completed treatment were classified as follows :—

Form of Infection.	Number of Cases.	Percentage of Total Cases.	Deaths.
Faucial and naso-pharyngeal	664	79·0	24
Faucial and laryngeal ..	16	1·9	2
Laryngeal and tracheo-bronchial .. .. .	6	0·7	3
Rhinitis .. .. .	86	10·2	2
Other sites .. .. .	1	0·1	—
Bacteriological .. .. .	67	8·0	—
Total .. .. .	840	100·0	31

The primary causes of death of two of the patients placed in the above table were (1) femoral thrombosis and chronic endocarditis in a woman of 63 years and (2) broncho-pneumonia following measles in a child of 4 months, but they are included as a mild form of diphtheria was present as a concurrent infection.

*Diphtheria in Infancy.*—In the course of the year 21 infants were admitted from a hospital in the city with a notified diagnosis of diphtheria. With one exception aged 9 weeks, the ages were 21 days or less, the youngest being 6 days old. All showed bacteriological evidence of diphtheritic infection, and all the members of the first group to be admitted, consisting of 10 infants were infected with organisms of the mitis type. Six members of this group showed clinical evidence of diphtheria. Infection was limited to the nose in five cases but the remaining one, whose age was 15 days and in whom a Schick test some hours prior to the injection of antitoxin gave a negative result, showed extensive diphtheritic pseudo-membrane on the posterior pharyngeal wall and in the right nostril. This patient, and one other whose infection was limited to the nose, died of diphtheritic broncho-pneumonia. This was confirmed by post-mortem examination and in both cases the diphtheria bacillus was recovered from the lungs. The remaining 11 patients were admitted later in the year over a period of some six months. They all recovered but some proved difficult to free from infection and remained in a carrier condition for a considerable time.

*Complications.*—Additional evidence of the somewhat milder type of diphtheria which was present during 1936 by comparison with that of three years ago, is given by the fall which has taken place in the complication rate during the last two years. In the year 1936 the complication rate was 11·3 per cent. while those for 1935 and 1934 were 12·8 per cent. and 15·7 per cent. respectively.

#### COMPLICATIONS.

	Number of patients.	Percentage of total patients.
All complications .. .. .	95	11·3
Paralysis :		
All types .. .. .	76	9·0
Eye .. .. .	32	3·8
Palate .. .. .	75	8·9
Pharynx .. .. .	12	1·4
Other types .. .. .	23	2·7

*Laryngeal Diphtheria.*—The incidence of laryngeal diphtheria remained low and of the 840 cases of diphtheria under treatment



during the year only 22 (2·6 per cent.) showed evidence of laryngeal involvement. Nine patients required tracheotomy for relief of laryngeal obstruction and of these four died (one was complicated by measles broncho-pneumonia). Post-mortem examinations were made in three of these cases and two of them showed consolidated areas of lung from which the diphtheria bacillus was grown.

Type of Disease.	Number of patients.	Deaths.	Mortality per cent.
Laryngeal .. ..	2	2	100·0
Faucial and laryngeal ..	7	2	28·6
All types .. ..	9	4	44·4

*Amended Diagnosis.*—Revision of diagnosis was necessary in 131 cases which is equivalent to 13·3 per cent. of all cases admitted with a notified diagnosis of diphtheria. Details of the final diagnosis are given below.

#### DIPHTHERIA REVISIONS, 1936.

Alveolar abscess .. ..	1
Bronchitis .. ..	2
Cellulitis of face .. ..	1
Chickenpox .. ..	1
Laryngitis .. ..	4
Measles .. ..	3
Myocarditis, chronic .. ..	1
Observation cases .. ..	3
Pontine tumour .. ..	1
Pneumonia, lobar .. ..	1
Puerperal fever .. ..	1
Quinsey .. ..	4
Scarlet fever .. ..	10
Stomatitis .. ..	1
Tonsillitis .. ..	93
Tuberculosis, generalised .. ..	1
Vincent's angina .. ..	3



*Cross Infection.*—The number of diphtheria patients who developed a second infection while in hospital was 32, or 3·8 per cent. Of these 14 were incubating the disease on admission to hospital and if these are excluded the number is reduced to 18, or 2·1 per cent. Mumps was the commonest cross infection; 17 patients developed this disease, and of these no less than 8 were infected before admission to hospital. The figures in brackets show the number of patients who were incubating the second infection on admission to hospital.

Chickenpox	..	..	..	..	7	(2)
Measles	..	..	..	..	2	(2)
Mumps	..	..	..	..	17	(8)
Scarlet fever	..	..	..	..	5	(2)
Whooping cough	..	..	..	..	1	
						<hr/>
						32 (14)
						<hr/>

**Scarlet Fever.**—The number of patients admitted during the year was 1,721 and the number discharged 1,747, as compared with 1,872 and 1,863 respectively in 1935. The average stay in hospital was 34·6 days as against 31·0 days in 1935. The greatest demand for hospital accommodation for scarlet fever patients took place during the early months of the year.

*Return Cases.*—The return case rate was 3·1 per cent. for the 1,747 patients discharged from hospital after scarlet fever. Of these 54 patients who were considered to have given rise to return cases, 35 showed no evidence of complications while in hospital, and 19 showed complications as follows: lesions of the skin or mucous membranes 8, adenitis 6, otorrhoea 2, relapse 1, and two had been complicated by albuminuria, arthritis and adenitis.

*Case Mortality.*—Ten deaths occurred in patients suffering from scarlet fever—three of these were in patients who showed a septic type of the disease with multiple complications, three from cardiac complications, one from broncho-pneumonia, due to concurrent measles and whooping cough, one, admitted at a late stage of the disease, from uraemia, one, admitted on the 16th day of the disease, from cavernous sinus thrombosis, and one, admitted on the 19th

day of the disease, from femoral thrombosis which led to gangrene of both legs. The last two patients died within 48 hours of admission to hospital.

*Type of Disease.*—As in recent years the great majority of the cases were of a mild type and cases of a severe type were rarely seen. Excluding the fatal cases which have already been noted, 10 patients were considered to be septic in type and one was classified as toxic.

*Complications.*—The complication rate remained much the same as in previous years, but that for otorrhoea showed an increase of slightly more than two per cent. The following table shows the percentage incidence of the principle complications.

Complication.	Number.	Percentage incidence.
Adenitis (suppurative in 12 cases)	131	7·5
Albuminuria ..	12	0·7
Arthritis .. ..	28	1·6
Nephritis .. ..	17	1·0
Otorrhœa .. ..	125	7·1
Relapse .. ..	11	0·6
Rhinitis .. ..	29	1·7
Total ..	353	20·0

The particularly low rate for relapse is due to the administration of increasing doses of scarlatinal prophylactic to all young children who give a positive Dick test at the end of acute stage of the disease. This practice has been followed since 1934 and the table given below shows that the relapse rate has been maintained at a low figure during the last three years.

	1932.	1933.	1934.	1935.	1936.
First week ..	1	1	2	1	1
Second week ..	7	4	7	5	2
Third week ..	12	14	10	5	6
Fourth week ..	10	25	17	4	1
Later .. ..	8	26	7	1	1
Total ..	38	70	43	16	11
Relapse rate ..	4.0	4.3	1.7	0.85	0.63

*Amended Diagnosis.*—It was found necessary to revise the notified diagnosis in 70 cases, which is equivalent to 3.9 per cent. of all cases admitted to hospital with a notified diagnosis of scarlet fever. Details of the final diagnosis are as follows :—

Acute coryza .. ..	3
Adenitis .. ..	1
Atropine dermatitis .. ..	1
Catarrhal jaundice .. ..	1
Chickenpox .. ..	1
Erythema multiforme .. ..	3
Erythema nodosum .. ..	1
Erythema simplex .. ..	5
Laceration of scalp, septic .. ..	1
Measles .. ..	8
Observation cases .. ..	11
Otitis media .. ..	1
Pharyngitis .. ..	1
Pleural effusion .. ..	1
Rhinitis .. ..	1
Rubella .. ..	1
Tonsillitis .. ..	25
Urticaria .. ..	3
Vincent's angina .. ..	1
Total .. ..	<u>70</u>

*Cross Infection.*—The cross infection rate remains low. The number of patients suffering from scarlet fever who developed a second infection while in hospital was 66, which is 3·8 per cent. of all cases. Measles, which occurred in epidemic form during the early part of the year, gave rise to a large proportion of these cross infections.

In the table given below the figures in brackets indicate the number of patients who were incubating the second infection on admission to hospital, and if these are excluded the cross infection rate is reduced to 2·8 per cent.

Measles	..	..	..	..	28	(7)
Whooping cough	..	..	..	..	12	(2)
Diphtheria	..	..	..	..	9	(1)
Chickenpox	..	..	..	..	7	(3)
Mumps	..	..	..	..	6	(3)
Erysipelas	..	..	..	..	4	(1)
					—	—
					66	(17)
					==	==

*Double Infection.*—A second infection was found to be present on admission in 16 cases. The concurrent diseases were whooping cough 8 cases, chickenpox 3, erysipelas 3, diphtheria 1, and mumps 1.

**Measles.**—The number of patients suffering from this disease was 140, and of these 8 were notified as suffering from scarlet fever, 3 from diphtheria and 2 from pneumonia.

Revision of diagnosis was required in 4 cases which were shown to be suffering from scarlet fever, acute coryza, eczema, and erythema multiforme respectively.

The number of deaths was 7, which gives a death-rate of 5 per cent. for hospital treated cases. The cause of death in 6 cases was broncho pneumonia (one followed tracheotomy) and the other miliary tuberculosis.

Two patients required tracheotomy for the relief of laryngeal obstruction; one, noted above, died of broncho-pneumonia, and the other recovered.

	Age Groups.							Died.
	0-1	1-4	5-9	10-14	15-19	20+	Total	
Male .. ..	7	46	14	..	..	..	67	
Died .. ..	3	1	..	..	..	..		4
Female .. ..	2	45	12	3	4	7	73	
Died .. ..	..	3	..	..	..	..		3

Complications occurred as follows in those patients who recovered :—

Pneumonia	..	..	..	..	24
Otorrhoea ..	..	..	..	..	19
Bronchitis ..	..	..	..	..	7
Laryngitis ..	..	..	..	..	2
Tonsillitis ..	..	..	..	..	2
Encephalitis	..	..	..	..	1
Enteritis ..	..	..	..	..	1
Jaundice ..	..	..	..	..	1
Nephritis ..	..	..	..	..	1

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**Erysipelas.**—The number of cases in which the diagnosis was confirmed was 154 and of these 11 died, a mortality of 7·1 per cent. Complications were few; three patients developed abscesses, one nephritis and one otitis media, and relapse was seen in three cases. During the last six months of the year sulphonamide preparations were used in the treatment of certain patients suffering from this disease, with very promising results.

Situation.	Total number.	Deaths.
Face .. ..	149	11
Limbs .. ..	4	—
Generalised ..	1	—
	154	11 (7·1%)

Twenty-one patients admitted with a notified diagnosis of erysipelas required revision of diagnosis as follows: cellulitis or other suppurative condition 6, eczema 3, herpes frontalis 3, dermatitis 2, scarlet fever 2, frontal and maxillary sinusitis 2, toxic erythema 1, impetigo 1, and exfoliative dermatitis 1.

**Enteric Fever.**—Six patients suffering from this disease came under treatment during the year; in 4 cases the infecting organism was *B. typhosus* and in 2 cases *B. paratyphosus* B. All six patients recovered, five without complications. The remaining case was complicated by cholecystitis.

In the case of four patients the notified diagnosis of enteric fever required revision; the actual conditions were acute enteritis, lobar pneumonia, influenza and ulcerative colitis.

**Puerperal Fever.**—Fifteen patients suffering from puerperal fever, including one of sepsis following abortion, were admitted as compared with 25 in 1935 and 31 in 1934. Two deaths took place one from septicaemia following pelvic peritonitis and the other from general peritonitis, and the cause of death in each case was confirmed by post-mortem examination.

The services of Mr. Carlton Oldfield, consultant gynaecologist, were available until his retirement in July, since when the appointment has been held by Mr. A. M. Claye, M.D., F.R.C.S.

**Cerebro-Spinal Fever.**—Seven cases of cerebro-spinal fever were admitted during 1936 and of these four recovered and three died. The ages of the patients who died were 2 years, 58 years and 62 years. In 3 other cases the diagnosis was amended to epilepsy, subarachnoid haemorrhage, and meningism.

**Anthrax.**—A man, aged 31 years, suffering from cutaneous anthrax was admitted on the third day of the disease. The malignant postule was situated on the right side of the forehead and was accompanied by oedema of the eye-lids and face, and enlargement of the cervical glands. He was treated by the intravenous injection of 130 c.cm. of anti-anthrax serum in divided doses over 48 hours and made an uneventful recovery.



**Treatment of Ear, Nose and Throat Conditions.**—Removal of tonsils and adenoids for the relief of the carrier state in diphtheria was carried out in 13 cases and was successful in all. Ten of the 13 patients became clear of infection within 14 days of the operation and the average period for all cases was 17·5 days. Mastoid antrotomy was performed on 8 patients and tonsillectomy on 6 patients suffering from scarlet fever.

The services of Mr. Maxwell Mumby, F.R.C.S., continue to be available.

**Immunisation of Staff.**—All new members of the medical, nursing and domestic staffs, a total number of 106 persons, were Schick and Dick tested, and those who showed susceptibility to diphtheria or scarlet fever were immunised against these diseases.

*Diphtheria.*—It was found that 27 (25·5%) of the new entrants were Schick positive. Twenty-five of these were immunised by two small doses of A.P.T. given at an interval of two weeks, and one received a course of T.A.F. Immunity to diphtheria was established rapidly, except in the case of one nurse who remained Schick positive until the eighth week after injections of A.P.T., when she left the hospital. The remaining Schick positive reactor left the hospital before the course of injections was started.

Four members of the staff were considered to have suffered from diphtheria during the period under review, but, as will be seen, one of them developed the disease in December, 1935. This was a severe infection contracted within a week of entering the hospital. The other three cases were of a mild type and free from complications.

3,569—Schick positive 3/12/35, A.P.T. 0·2 c.cm. 7/12/35, severe faucial diphtheria 7/12/35. Diphtheria antitoxin 100,000 units.

91—Schick positive 2/7/35, A.P.T. 0·5 c.cm. 31/7/35, faucial diphtheria 8/1/36, Schick positive, diphtheria antitoxin 20,000 units.

963—Schick positive 7/11/35, A.P.T. 0·2 c.cm. 16/11/35, A.P.T. 0·5 c.cm. 30/11/35, Schick negative 23/1/36. Mild faucial diphtheria 18/4/36. No serum.

1,240—Schick positive 21/11/35, A.P.T. 0·2 c.cm. 30/11/35, A.P.T. 0·5 c.cm. 14/12/35, Schick negative 30/1/36, faucial diphtheria 27/4/36, Schick positive, diphtheria antitoxin 20,000 units.



*Scarlet Fever.*—Twenty (19.0%) of the 106 new entrants gave positive reactions to the Dick test. One of these left the hospital before the immunising injections were completed, but the others received approximately 72,000 skin test doses, in a course of four injections. Two nurses failed to obtain immunity with this series of injections. One received a second course of prophylactic and then showed a negative Dick test, but the other contracted a clinical attack of scarlet fever before immunity could be produced. One other nurse, a known Dick positive reactor who was receiving prophylactic injections, and a maid who had not been Dick tested previously, suffered from the disease during the year 1936.

No person who had shown a negative reaction to the Dick test, either as a first test or as a result of prophylactic injections, developed scarlet fever.

Injections of T.A.B., vaccine were given to 20 nurses and one ward maid who were working on a ward receiving enteric fever.

*Sickness of Staff.*—The health of the staff remained good throughout the year, the number requiring admission to the wards being 17. One death took place from influenzal pneumonia.

The details of staff illnesses are as follows :—

Nature of Illness.	Staff.			Days in Hospital.		
	Nursing.	Do-mestic.	Male.	Nursing.	Do-mestic.	Male.
Diphtheria .. ..	4	..	..	195	..	..
Scarlet fever .. ..	2	I	..	74	28	..
Aural furuncle .. ..	I	..	..	4	..	..
Chorea .. ..	I	..	..	53	..	..
Catarrhal jaundice .. ..	I	..	..	12	..	..
Chickenpox .. ..	..	..	I	..	..	12
Pneumonia .. ..	I	..	..	5	..	..
Mumps .. ..	I	..	..	14	..	..
Quinsy .. ..	I	..	..	10	..	..
Sub-acute appendicitis .. ..	I	..	..	10	..	..
Subacute rheumatism .. ..	I	..	..	55	..	..
Tonsillitis .. ..	2	..	..	15	..	..
Whitlow .. ..	I	..	..	17	..	..
TOTAL .. ..	17	I	I	464	28	12

## SUMMARY OF CASES.

DISEASE.	Total number of cases.	Deaths
INFECTIOUS DISEASES :—		
Anthrax .. .. .	1	..
Chickenpox .. .. .	16	..
Cerebro-spinal fever .. .. .	7	3
Diphtheria .. .. .	840	31
Enteric fever .. .. .	6	..
Enteritis .. .. .	3	1
Erysipelas .. .. .	154	11
Measles .. .. .	140	7
Mumps .. .. .	30	..
Pneumonia .. .. .	4	1
Puerperal fever .. .. .	17	2
Rubella .. .. .	1	..
Scarlet fever .. .. .	1,757	10
Whooping cough .. .. .	29	5
DISEASES OF THE EAR, NOSE AND THROAT :—		
Acute coryza .. .. .	4	..
Laryngitis .. .. .	4	..
Otitis media .. .. .	1	..
Pharyngitis .. .. .	1	..
Quinsy .. .. .	6	1
Rhinitis .. .. .	1	..
Sinusitis, frontal and maxillary .. .. .	2	..
Stomatitis .. .. .	1	..
Tonsillitis .. .. .	121	1
Vincent's angina .. .. .	4	..
DISEASES OF THE SKIN :—		
Atropine dermatitis .. .. .	1	..
Dermatitis .. .. .	2	..
Exfoliative dermatitis .. .. .	1	..
Eczema .. .. .	4	..
Erythema multiforme .. .. .	4	..
Erythema nodosum .. .. .	1	..
Furunculosis .. .. .	3	..
Herpes frontalis .. .. .	3	..
Impetigo .. .. .	1	..
Simple erythema .. .. .	5	..
Toxic erythema .. .. .	1	..
Urticaria .. .. .	3	..
OTHER DISEASES :—		
Adenitis, cervical .. .. .	2	..
Alveolar abscess .. .. .	1	..
Bronchitis .. .. .	3	..
Catarrhal jaundice .. .. .	2	..
Cellulitis .. .. .	3	1
Carried forward .. .. .	3,190	74

## SUMMARY OF CASES.—(Continued).

DISEASES.	Total number of cases.	Deaths.
Brought forward .. .. .	3,190	74
OTHER DISEASES (contd.) :—		
Chorea .. .. .	I	..
Epilepsy .. .. .	I	..
Hysteria .. .. .	I	..
Influenza .. .. .	I	..
Laceration of scalp, septic .. .. .	I	..
Meningism .. .. .	I	..
Myocarditis, chronic .. .. .	I	I
Observation for diphtheria .. .. .	3	..
Observation for scarlet fever.. .. .	II	..
Obstruction to Stenson's duct .. .. .	I	..
Pleural effusion .. .. .	I	..
Pontine tumour .. .. .	I	I
Prepatella bursitis .. .. .	I	..
Rheumatism .. .. .	I	..
Subacute appendicitis .. .. .	I	..
Subarachnoid hæmorrhage .. .. .	I	I
Tuberculosis, generalised .. .. .	I	I
Tuberculous meningitis .. .. .	I	I
Ulcerative colitis .. .. .	I	..
Whitlow .. .. .	2	..
Healthy baby admitted with mother .. .. .	2	..
TOTAL .. .. .	3,225	79

**Laboratory.**—The number of cultures from throat, nose, ear and other situations examined for diphtheria organisms was 8,654. The following additional examinations were made :—

Cerebro-spinal fluid .. .. .	16
Faeces (for enterica organisms) .. .. .	22
Urine (for enterica organisms) .. .. .	17
Urine (chemical and bacteriological examinations) .. .. .	7
Direct smears for Vincent's angina .. .. .	5
Cultures from abscesses .. .. .	4
Pleural fluid .. .. .	2
Fluid from anthrax pustule .. .. .	I
Blood sugar estimation .. .. .	I

# METEOROLOGICAL RECORD.

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1936.	SUN- SHINE. Total. hr. min.	SUNSHINE.			EARTH TEMPERATURE. ( $\frac{1}{4}$ ° below surface).			
		Max. in 24 hrs. hr. min.	Date.	No. of days no Sunshine.	Max.	Date.	Min.	Date.
January ..	36.40	6.50	17	19	40.5	12	37.0	28-30
February ..	71.30	7.40	11	8	38.0	2-7	35.5	22
March ..	64.00	8.00	19	10	41.5	29	36.0	1-4
April ..	208.50	13.10	22	3	43.5	30	41.5	1 and 20-22
May ..	164.30	13.20	10	3	49.0	31	43.5	1
June ..	172.30	10.50	17	1	53.5	29-30	48.5	2-10
July ..	152.20	10.20	22	2	55.5	15-31	54.0	1-5
August ..	169.30	11.50	3	..	57.0	30	55.5	1-10
September ..	117.50	10.00	22	1	57.5	3	55.5	29
October ..	128.10	10.00	5	2	55.5	1-2	51.0	29-31
November ..	55.00	6.20	2	6	50.0	1-3	44.0	29-30
December ..	37.20	5.40	6	14	44.0	1-8	41.0	20
Year ..	1,378.10	13.20	May 10	69	57.5	Sept. 3	35.5	Feb. 22

## LEEDS CITY HOSPITALS, SEACROFT, LEEDS.

YEAR 1936.

## ABSTRACT FROM REGISTERS.

	Diphtheria.	Enteric Fever.	Erysipelas.	Measles.	Pertussis.	Scarlet Fever.	Small Pox.	Other Diseases.	Quarantine Cottages.	TOTAL.
Patients remaining in Hospitals and Isolation Cottages, on Tuesday, December 31st, 1935 ..	94	1	9	6	7	206	..	16	..	339
Admitted from January 1st, 1936 to December 31st, 1936 .. ..	852	5	150	134	23	1,721	..	296	..	3,181
Total treated .. ..	946	6	159	140	30	1,927	..	312	..	3,520
Discharged .. ..	809	6	143	133	24	1,747	..	284	..	3,146
Died .. ..	31	..	11	7	5	10	..	15	..	79
Mortality per cent. ..	3·7	..	7·1	5·0	17·2	·57	..	5·0	..	2·4
Patients remaining in Hospitals and Isolation Cottages, on Thursday, December 31st, 1936 ..	106	..	5	..	1	170	..	13	..	295
Average days in Hospital for recovered patients..	44·7	62·7	19·5	22·1	34·4	34·6	..	21·6	..	34·9

NUMBER OF ADMISSIONS DURING EACH OF THE  
LAST TWENTY YEARS.

YEAR.	Seacroft Hospital.		Small Pox Hospital.	Admitted to all Hospitals.	Cottages for Contacts.	Total No. Admissions.
	Infectious Diseases.	Tuberculosis.				
1917-18	1,366	*545	..	1,911	6	1,917
1918-19	1,349	*421	..	1,770	8	1,778
1919-20	2,668	*378	..	3,046	33	3,079
1920-21	2,148	..	..	2,148	4	2,152
1921-22	2,430	..	..	2,430	6	2,436
1922-23	3,265	..	1	3,266	18	3,284
1923-24	2,185	..	..	2,185	16	2,201
1924-25	2,033	..	8	2,041	73	2,327
1925-26	1,944	..	4	1,948	8	1,956
1926-27	1,632	..	3	1,635	9	1,644
1927-28	1,793	..	81	1,874	186	2,060
**1928-29	4,059	*51	46	4,156	39	4,195
†1929	4,171	..	24	4,195	9	4,204
1930	3,554	..	42	3,596	29	3,625
1931	2,874	..	5	2,879	4	2,883
1932	2,347	..	..	2,347	..	2,347
1933	3,372	..	..	3,372	..	3,372
1934	5,387	..	..	5,387	..	5,387
1935	3,795	..	..	3,795	..	3,795
1936	3,181	..	..	3,181	..	3,181

\*Beds set apart for cases of tuberculosis in Seacroft hospital.

\*\*Ward taken over at Holbeck Infirmary for scarlet fever patients for three months.

†Year ending December 31st instead of March 31st.





## VENEREAL DISEASES.

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The number of deaths certified as due to syphilis during the year was 17, which is equal to a death-rate of 0.03 per thousand of the population. Of these, five were children under one year of age, four males and one female; two females between 25 and 45; two males and five females between 45 and 65; and three males over 65 years. The number of deaths in 1936 shows an increase of four as compared with the previous year.

**Work of the Treatment Centre.**—The total number of new cases registered at the Centre at the Leeds General Infirmary from Leeds and the other contributory areas was 2,134. Decreases were recorded in gonorrhoea (male 47, female 13) and other diseases not venereal (male 60, female 39) and there was an increase in syphilis (female 9). There was, therefore, a nett total decrease of all types of 150 as compared with the figure for the previous year. (Vide table on page 74).

The number of cases ceasing to attend before completion of treatment or final tests of cure was 517 or 11.3 per cent. of the total attending the centre as compared with 533 or 11.1 per cent. for the previous year.

The number of in-patients treated at the Leeds General Infirmary was 8 as compared with 9 for the previous year and the corresponding number of in-patient days was 407 as against 86 for 1935.

Turning to the Leeds cases the total number of new cases registered was 1,627, comprising 236 males and 124 females suffering from syphilis; 587 males and 138 females suffering from gonorrhoea; and 454 males and 88 females suffering from other diseases not venereal. As compared with the previous year these figures represent in the case of syphilis a decrease of 10 males and an increase of 2 females, in gonorrhoea a decrease of 20 males and 9 females, and in other diseases not venereal a decrease of 61 males and 45 females. Taking the cases of all types there was a decrease of 143 as compared with the figure for the previous year. (Vide table on page 74).

The total attendances of all Leeds cases was 65,499, a decrease of 2,367 on the figure for the previous year.

**Institutions.**—*Maternity Hospital.*—The number of new cases admitted as in-patients to the Leeds Maternity Hospital decreased from 14 in 1935 to 11 in 1936, namely 9 syphilis and 2 gonorrhoea. The corresponding number of in-patient days decreased from 163 to 125.

*Hope Hospital.*—The number of cases treated was 43 as against 40 for the previous year, whilst the number of new admissions was 31 as compared with 28 for 1935. It should be pointed out, however, that these figures do not include babies admitted with their mothers or born whilst their mothers were in residence.

Thanks are due to the Hospital Committee for the services rendered during the year. The hospital may be small but it is the general experience that small hospitals demand as much attention as large ones. Ever since its inception, 18 years ago, the hospital has been managed by a voluntary committee composed mainly of representatives of the Yorkshire Diocesan Board who have conducted its affairs with the greatest possible economy and efficiency. In the name of the Health Committee I should like to assure those representatives that their assistance has been greatly appreciated.

Further particulars of the cases admitted to and treated in the Maternity and Hope Hospitals are given in the table on page 75.

*For particulars of the work of the special clinic for mothers and babies suffering from venereal diseases held in connection with Maternity and Child Welfare see page 180.*

**Supply of Salvarsan Substitutes.**—The number of medical practitioners in the area qualified to receive free supplies of salvarsan substitutes up to the end of the year was 50. The amount of salvarsan substitutes distributed to practitioners was 980 doses as compared with 1,327 in 1935.

## LEEDS GENERAL INFIRMARY (LOCAL TREATMENT CENTRE).

Cases on the register on January 1st, 1936 ..	2,407
Old cases re-admitted .. .. .	27
New cases admitted (including 75 known to have received treatment at other centres) .. ..	2,134
Cases ceased to attend .. .. .	517
Transferred to other centres, etc. .. ..	226
Discharged on completion of treatment .. ..	1,360
Cases on the register on January 1st, 1937 ..	2,465

WORK DONE IN THE DEPARTMENT OF PATHOLOGY AND  
BACTERIOLOGY OF THE UNIVERSITY OF LEEDS IN CONNECTION  
WITH THE V.D. REGULATIONS.

NATURE OF TEST.	NUMBER OF TESTS.
For detection of spirochetes—	
for treatment centre .. .. .	70
for practitioners .. .. .	2
for institutions.. .. .	..
For detection of gonococci—	
for treatment centre .. .. .	2,089
for practitioners .. .. .	275
for institutions .. .. .	213
For Wassermann reaction—	
for treatment centre .. .. .	3,426
for practitioners .. .. .	383
for institutions .. .. .	3,817
Other examinations—	
for treatment centre .. .. .	1,894
for practitioners .. .. .	61
for institutions .. .. .	228
TOTAL .. .. .	12,458

PERSONS TREATED AT THE GENERAL INFIRMARY, LEEDS.  
(LOCAL TREATMENT CENTRE).

				Year 1935.		Year 1936.		Increase or decrease.	
				M.	F.	M.	F.	M.	F.
Syphilis ..	first cases	..	..	348	172	348	181	- +	+ 9
Soft chancre	"	..	..	..	..	..	..	..	..
Gonorrhœa	"	..	..	775	197	728	184	- 47	- 13
Other diseases									
not Venereal	"	..	..	629	163	569	124	- 60	- 39
Total	..	..	..	1,752	532	1,645	489	-107	- 43
Total attendances of all cases				82,212		78,641		- 3,571	
Aggregate No. of In-patient days .. ..				86		407		+ 321	
No. of doses of Salvarsan substitutes .. ..				16,542		16,452		- 90	
Pathological specimens examined :—									
Spirochetes .. ..				77		70		- 7	
Gonococci .. ..				4,624		3,983		- 641	
Other organisms .. ..				..		..		..	
Blood—Wassermann reaction .. ..				3,454		3,426		- 28	

LEEDS PATIENTS.

	Year 1935.		Year 1936.		Increase or decrease.	
	M.	F.	M.	F.	M.	F.
Syphilis .. .. first cases	246	122	236	124	- 10	+ 2
Soft chancre .. ..	..	..	..	..	..	..
Gonorrhœa .. ..	607	147	587	138	- 20	- 9
Other diseases, not Venereal .. ..	515	133	454	88	- 61	- 45
Total .. ..	1,368	402	1,277	350	- 91	- 52
Total attendances of all cases	67,866		65,499		- 2,367	
Aggregate No. of In-patient days .. ..	86		166		+ 80	
No. of doses of Salvarsan sub- stitutes .. ..	12,481		12,363		- 118	
Pathological specimens examined :—						
Spirochetes .. ..	65		61		- 4	
Gonococci .. ..	3,773		3,186		- 587	
Other organisms .. ..	..		..		..	
Blood—Wassermann re- action .. ..	2,745		2,699		- 46	

## MATERNITY HOSPITAL, 42, HYDE TERRACE.

	Cases in residence on Jan. 1st, 1936.	Cases admitted.	Cases discharged.	Cases in residence on Dec. 31st, 1936.
Syphilis .. ..	..	9	9	..
Gonorrhœa .. ..	..	2	2	..
Syphilis and Gonorrhœa .. ..	..	..	..	..
Other disease .. ..	..	..	..	..
Total .. ..	..	11	11	..

Total days in residence .. .. 125

No. of doses of Salvarsan substitute .. 9

**Pathological specimens examined :—**

Spirochetes .. .. 69

Gonococci .. .. 14

Other organisms .. .. 123

Blood—Wassermann reaction.. .. 113

## HOPE HOSPITAL, 126, CHAPELTOWN ROAD.

	Cases in residence on Dec. 28th, 1935.	Cases admitted.	Cases discharged.	Cases in residence on Jan. 2nd, 1937.
Syphilis .. ..	3(+1)	8(+4)	6(+4)	5(+1)
Gonorrhœa .. ..	7(+3)	16(+9)	19(+9)	4(+3)
Syphilis and Gonorrhœa .. ..	2	7	4	5
Other disease .. ..	..	..	..	..
Total .. ..	12(+4)	31(+13)	(29+13)	14(+4)

Total days in residence .. .. 4,775(+1,896)

No. of doses of Salvarsan substitute .. 131(+37)

**Pathological specimens examined :—**

Spirochetes .. ..

Gonococci.. .. 182

Other organisms .. ..

Blood—Wassermann reaction.. .. 42(+6)

Of the 31 women admitted, 13 had babies, shown in the above table in brackets.



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## Municipal Hospitals.

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## LEEDS CITY GENERAL HOSPITALS

BY

J. DICK, M.B., Ch.B., D.P.H.,

*Medical Superintendent.***ST. JAMES'S HOSPITAL.**

The number of patients admitted to hospital and the total treated are shown in the following table, together with the number of discharges and deaths and the number of patients remaining at the end of the year.

	Men.	Women.	Children.	Total.
Remaining in hospital on 31st December, 1935 .. ..	335	524	226	1,085
Admitted during 1936 .. ..	3,569	4,688	1,787	10,044
Children born during 1936 .. ..	..	..	987	987
Total admissions and births ..	3,569	4,688	2,774	11,031
Total number treated during 1936.. .. .	3,904	5,212	3,000	12,116
Discharges during 1936 .. ..	2,787	4,126	2,456	9,369
Deaths .. .. .	713	631	271	1,615
Total discharges and deaths ..	3,500	4,757	2,727	10,984
Remaining in hospital on 31st December, 1936 .. ..	404	455	273	1,132

The admissions show an increase of 876 over those of 1935, and were 4,120 more than five years ago. The average daily number under treatment was 1,106, the highest on any one day having been 1,216 on 27th February, and the lowest 932 on 9th August. The latter figure occurred when a large number of patients was transferred to St. George's Infirmary on the completion of the alterations there. During a considerable part of the year the accommodation was reduced by nearly 100 beds owing to the closing of wards for alterations. The average stay for all cases was 36.84 days, which is 5.36 days less than the previous year.

## DISEASES FROM WHICH PATIENTS SUFFERED.

DISEASE.	Men.	Women.	Children.	Total.	DISEASE.	Men.	Women.	Children.	Total.
<b>INFECTIOUS DISEASES :—</b>					<b>MALIGNANT DISEASE—</b>				
Cerebro-spinal Fever ..	7	1	10	18	<i>Continued.</i>				
Chickenpox .. ..	..	..	5	5	Melanotic Sarcoma ..	4	1	..	5
Diphtheria .. ..	12	..	4	6	Retroperitoneal Sarcoma ..	..	1	..	1
Erysipelas .. ..	7	6	5	18	Meningioma .. ..	..	3	..	3
Measles .. ..	..	..	23	23	Cerebral Tumour .. ..	4	4	1	9
Mumps .. ..	..	..	1	1		255	206	1	462
Ophthalmia Neonatorum ..	..	..	2	2	<b>RHEUMATISM :—</b>				
Polio-myelitis .. ..	1	1	4	6	1. Acute Rheumatism ..	2	9	22	33
Scarlet Fever .. ..	..	..	2	2	"    "    "    with				
Whooping Cough .. ..	..	..	25	25	Valvular Heart Disease ..	1	3	10	14
	17	8	81	106	Chorea .. ..	..	8	44	52
<b>INFLUENZA .. ..</b>	..	8	16	24	"    "    "    with				
					Heart Disease .. ..	..	2	7	9
<b>TUBERCULOSIS :—</b>					Rheumatic Carditis ..	..	2	13	15
Pulmonary .. ..	107	50	9	166		3	24	96	123
					2. Fibrositis .. ..	24	39	1	64
<b>Non-pulmonary :—</b>					Myalgia .. ..	4	3	..	7
Bones and Joints .. ..	14	10	7	31	Sciatica .. ..	8	3	..	11
Lymphatic Glands .. ..	7	7	16	30	Chronic Rheumatism ..	2	2	..	4
Meninges .. ..	2	2	10	14		38	47	1	86
Salpinges .. ..	..	1	..	1					
Genito-Urinary .. ..	10	2	..	12	3. Osteo-arthritis .. ..	27	23	..	50
Testes .. ..	3	..	..	3	Rheumatoid Arthritis ..	15	39	..	54
Stomach Wall .. ..	1	..	..	1		42	62	..	104
Intestines .. ..	2	..	..	2					
Peritoneum .. ..	1	2	3	6	<b>VENEREAL DISEASES :—</b>				
Pericardium .. ..	..	..	1	1	Syphilis .. ..	11	6	..	17
Skin .. ..	1	1	1	3	Gumma .. ..	1	..	..	1
Ulcer .. ..	1	..	..	1	Congenital Syphilis ..	..	..	5	5
Miliary .. ..	3	1	3	7	Gonorrhoea .. ..	21	1	..	22
	45	26	41	112	Gonococcal Arthritis ..	2	1	..	3
<b>MALIGNANT DISEASE :—</b>					Syphilitic Arthritis ..	..	..	1	1
Cancer of Larynx .. ..	1	1	..	2	Perforating Ulcer of Palate..	..	..	2	2
"    "    Bronchus ..	38	6	..	44		35	8	8	51
"    "    Lung .. ..	3	2	..	5	<b>PUERPERAL PYREXIA :—</b>				
"    "    Mediastinum ..	1	..	..	1	Delivered in hospital ..	..	32	..	32
"    "    Jaw .. ..	3	..	..	3	Cases delivered before	..	4	..	4
"    "    Maxillary Antrum ..	..	1	..	1	admission .. ..	..	..	..	..
"    "    Parotid .. ..	3	..	..	3		..	36	..	36
"    "    Mouth .. ..	4	2	..	6	<b>PUERPERAL FEVER .. ..</b>	..	4	..	4
"    "    Tongue .. ..	11	..	..	11					
"    "    Fauces .. ..	2	..	..	2	<b>OTHER DISEASES AND</b>				
"    "    Pharynx .. ..	4	..	..	4	<b>ACCIDENTS CONNECTED WITH</b>				
"    "    Oesophagus ..	12	4	..	16	<b>PREGNANCY AND CHILD-</b>				
"    "    Stomach .. ..	41	15	..	56	<b>BIRTH :—</b>				
"    "    Cæcum .. ..	..	2	..	2	Abortion .. ..	..	238	..	238
"    "    Colon .. ..	36	30	..	66	Threatened abortion ..	..	32	..	32
"    "    Rectum .. ..	14	9	..	23	Hydatidiform Mole .. ..	..	2	..	2
"    "    Liver .. ..	5	2	..	7	Ectopic Gestation .. ..	..	10	..	10
"    "    Gall Bladder ..	..	2	..	2	Perforation of Uterus ..	..	1	..	1
"    "    Common Bile Duct ..	1	1	..	2	Ante-natal cases :—				
"    "    Pancreas .. ..	5	8	..	13	Albuminuria .. ..	..	24	..	24
Abdominal Carcinomatosis ..	19	17	..	36	Pyelitis .. ..	..	28	..	28
Cancer of Kidney .. ..	6	..	..	6	Vomiting .. ..	..	12	..	12
"    "    Bladder .. ..	5	3	..	8	Severe Toxaemia .. ..	..	5	..	5
"    "    Prostate .. ..	23	..	..	23	Acute Liver Necrosis ..	..	1	..	1
"    "    Penis .. ..	1	..	..	1	Chorea .. ..	..	4	..	4
"    "    Testis .. ..	1	..	..	1	Retroverted Gravid Uterus ..	..	1	..	1
"    "    Breast .. ..	..	39	..	39	Ante-partum Haemorrhage ..	..	5	..	5
"    "    Ovary .. ..	..	5	..	5	Placenta Prævia .. ..	..	1	..	1
"    "    Uterus .. ..	..	39	..	39					
"    "    Vulva .. ..	..	3	..	3					
"    "    Skin .. ..	7	3	..	10					
Sarcoma of Uterus .. ..	..	1	..	1					
"    "    Muscle .. ..	..	1	..	1					
"    "    Bone .. ..	1	1	..	2					

## DISEASES FROM WHICH PATIENTS SUFFERED.—(Continued).

DISEASE.	Men.	Women.	Children.	Total.	DISEASE.	Men.	Women.	Children.	Total.
OTHER DISEASES AND ACCIDENTS CONNECTED WITH PREGNANCY AND CHILDBIRTH—Continued.					INJURIES—Continued.				
Ante-natal cases—Continued.					Fractures:—				
Femoral Phlebitis .. .. .	..	1	..	1	Tibia and Fibula .. .. .	43	18	5	66
Varicose Ulcer .. .. .	..	1	..	1	Pott's .. .. .	7	32	..	39
Prolapsed Hæmorrhoids .. .. .	..	1	..	1	Os Calcis .. .. .	3	2	..	5
Valvular Heart Disease .. .. .	..	5	..	5	Astragalus .. .. .	2	..	..	2
Chronic Bronchitis .. .. .	..	2	..	2	Cuboid .. .. .	1	..	..	1
Asthma .. .. .	..	1	..	1	Skull .. .. .	9	2	3	14
Dehility .. .. .	..	3	..	3	Jaw .. .. .	2	..	..	2
Ovarian Cyst .. .. .	..	1	..	1	Spine .. .. .	1	1	..	2
Pelvic Cellulitis .. .. .	..	1	..	1	Pelvis .. .. .	6	3	1	10
Appendicitis .. .. .	..	2	..	2	Ribs .. .. .	13	5	..	18
Enteritis .. .. .	..	1	..	1	Multiple .. .. .	1	1	..	2
Secondary Anæmia .. .. .	..	1	..	1	Dislocations:—				
Correction of presentation .. .. .	..	2	..	2	Shoulder .. .. .	1	2	..	3
Puerperal conditions:—					Big Toe .. .. .	1	..	..	1
Post-partum hæmorrhage .. .. .	..	2	..	2	Traumatic Cerebral Lesions	5	..	2	7
Phlegmasia Alba Dolens .. .. .	..	2	..	2	Concussion .. .. .	61	25	18	104
Dehility .. .. .	..	1	..	1	Injury to Cervical Cord .. .. .	1	..	..	1
Subinvolution .. .. .	..	2	..	2	Spinal Concussion .. .. .	1	..	..	1
Lobar Pneumonia .. .. .	..	1	..	1	Wounds .. .. .	17	9	3	29
Perineal Tear .. .. .	..	2	..	2	Abrasions .. .. .	19	8	6	33
Prolapse:—					Contusions .. .. .	12	5	5	22
Cystocele .. .. .	..	6	..	6	Sprains .. .. .	11	4	2	17
Rectocele .. .. .	..	2	..	2	Ruptured Kidney .. .. .	1	..	..	1
Confusional Mental states .. .. .	..	8	..	8	„ Muscle .. .. .	1	..	..	1
Breast Abscess and Mastitis .. .. .	..	23	..	23	„ Tendon .. .. .	1	..	..	1
Pseudocyst .. .. .	..	1	..	1	Burns and Scalds .. .. .	9	14	24	47
	..	436	..	436	Foreign body in tissues .. .. .	1	2	..	3
MENTAL DISEASES:—					Traumatic Headache .. .. .	..	2	..	2
Neurosis .. .. .	5	5	..	10	„ Neurasthenia .. .. .	1	..	..	1
Psycho-Neurosis .. .. .	1	2	..	3	Peritonitis .. .. .	..	1	..	1
Psychosis .. .. .	3	11	..	14	Asphyxia .. .. .	..	..	1	1
Confusional states .. .. .	12	25	..	37	Attempted suicide:—				
Delusional states .. .. .	32	58	..	90	Drowning .. .. .	..	2	..	2
Mania .. .. .	9	11	..	20	Cut-throat .. .. .	4	..	..	4
Melancholia .. .. .	25	54	2	81	Self-Strangulation .. .. .	..	1	..	1
Dementia Præcox .. .. .	8	2	..	10	Poisoning—Suicidal:—				
Dementia .. .. .	7	13	..	20	Ammonia .. .. .	1	1	..	2
Senile Dementia .. .. .	8	9	..	17	Aspirin .. .. .	..	1	..	1
Dementia Paralytica .. .. .	17	1	..	18	Coal-gas .. .. .	5	5	..	10
Taho-paresis .. .. .	1	..	..	1	Liniment .. .. .	2	..	..	2
Mental Instability .. .. .	13	7	..	20	Narcotic .. .. .	..	1	..	1
Loss of memory .. .. .	2	3	..	5	Phenobarbitone .. .. .	..	1	..	1
Delirium Tremens .. .. .	1	1	..	2	Veronal .. .. .	..	1	..	1
Mental observation .. .. .	14	20	..	34	Accidental poisoning:—				
Mental deficiency .. .. .	10	4	14	28	Lead .. .. .	..	1	..	1
	168	226	16	410	Alcoholism .. .. .	12	4	..	16
INJURIES AND OTHER FORMS OF VIOLENCE:—						336	251	95	682
Fractures:—					DISORDERS OF NERVOUS SYSTEM:—				
Clavicle .. .. .	6	1	..	7	Cerebral Aneurysm .. .. .	2	2	..	4
Scapula .. .. .	1	..	..	1	„ Hæmorrhage .. .. .	16	17	..	33
Humerus .. .. .	11	12	2	25	„ Thrombosis .. .. .	80	75	..	155
„ with Dislocation of Shoulder	2	..	..	2	„ Cortical Atrophy .. .. .	12	9	..	21
Radius .. .. .	4	4	..	8	„ Diplegia .. .. .	4	1	..	5
Ulna .. .. .	4	5	1	10	„ Syphilis .. .. .	1	2	..	3
Radius and Ulna .. .. .	2	3	3	8	„ Abscess .. .. .	2	..	1	3
Colles' .. .. .	1	8	1	10	Infantile Hemiplegia .. .. .	..	..	1	1
Metacarpals .. .. .	2	..	1	3	Hydrocephalus, Congenital .. .. .	1	..	2	3
Phalanges .. .. .	2	..	1	3	Cyst of Pituitary .. .. .	1	..	..	1
Femur .. .. .	24	52	6	82	Adenoma of Pituitary .. .. .	..	1	..	1
Patella .. .. .	7	1	..	8	Paralysis Agitans .. .. .	8	6	..	14
Fibula .. .. .	2	4	1	7	Post-encephalitic .. .. .	..	..	..	..
Tibia .. .. .	13	7	9	29	Parkinsonism .. .. .	6	18	..	24
					Post-encephalitic Oshesity .. .. .	..	1	..	1
					Huntington's Chorea .. .. .	1	..	..	1
					Epilepsy .. .. .	41	48	12	101
					Convulsions .. .. .	..	..	8	8
					Habit Spasm .. .. .	..	..	2	2
					Meningitis, pneumococcal .. .. .	..	..	1	1

## DISEASES FROM WHICH PATIENTS SUFFERED.—(Continued).

DISEASE.	Men.	Women.	Children.	Total.	DISEASE.	Men.	Women.	Children.	Total.
<b>DISORDERS OF NERVOUS SYSTEM—continued.</b>					<b>DISEASES OF THE RESPIRATORY SYSTEM :—</b>				
Meningitis Lymphocytic .. ..	1	1	..	1	Upper Respiratory Infection .. ..	..	..	78	78
Post-meningitic paralysis .. ..	1	..	..	1	Bronchitis .. ..	158	106	30	294
Locomotor Ataxia .. ..	9	3	..	12	Broncho-pneumonia .. ..	43	35	94	172
Friedreich's Ataxia .. ..	..	1	..	1	Lobar Pneumonia .. ..	140	49	135	324
Amyotrophic Lateral Sclerosis .. ..	..	1	..	1	Empyema—Pneumococcal .. ..	14	3	9	26
Transverse Myelitis .. ..	1	..	..	1	" Streptococcal .. ..	2	..	..	2
Disseminated Sclerosis .. ..	8	20	..	28	Abscess of Lung .. ..	2	3	1	6
Syringomyelia .. ..	..	1	..	1	Gangrene of Lung .. ..	1	..	..	1
Spastic Paraplegia .. ..	2	2	..	4	Pulmonary Embolism .. ..	1	..	..	1
Cerebro-spinal Syphilis .. ..	2	1	..	3	Fibrosis of Lung .. ..	4	6	1	11
Spina Bifida .. ..	..	..	6	6	Silicosis .. ..	1	..	..	1
Tumour of Acoustic Nerve .. ..	1	..	..	1	Bronchiectasis .. ..	20	13	5	38
Neuritis .. ..	5	4	..	9	Bronchial Fistula .. ..	..	1	..	1
Neurofibromatosis .. ..	..	2	..	2	Hæmoptysis .. ..	3	1	..	4
Neuralgia .. ..	4	5	..	9	Pleurisy .. ..	14	7	6	27
Ulnar Palsy .. ..	1	..	..	1	" with effusion .. ..	4	2	1	7
Stump Neuroma .. ..	1	..	..	1	Spontaneous Pneumothorax .. ..	..	2	1	3
Progressive Muscular Dystrophy .. ..	2	2	1	5	Asthma .. ..	7	9	4	20
Pseudohypertrophic Muscular Paralysis .. ..	1	..	..	1	Coryza .. ..	1	2	..	3
Myasthenia Gravis .. ..	..	3	..	3	Suppurative Mediastinitis .. ..	..	..	1	1
Headache .. ..	..	3	..	3		415	239	366	1,020
Neurasthenia .. ..	20	37	..	57	<b>DISEASES OF THE CIRCULATORY SYSTEM :—</b>				
Hysteria .. ..	5	17	1	23	Pericarditis .. ..	2	..	1	3
Hiccup .. ..	2	..	..	2	Acute Endocarditis .. ..	1	1	..	2
Meningismus .. ..	..	1	..	1	Infective Endocarditis .. ..	2	7	1	10
	240	284	35	559	Valvular Heart Disease .. ..	60	101	35	196
<b>DISEASES OF THE EYE :—</b>					Congenital Heart Lesion .. ..	..	1	5	6
Blepharitis .. ..	..	..	3	3	Cardiac Myopathy .. ..	120	87	..	207
Conjunctivitis .. ..	1	..	4	5	Arterio-Sclerosis .. ..	196	191	..	387
Corneal Ulcer .. ..	2	1	..	3	Hyperpiesia .. ..	29	37	..	66
Interstitial Keratitis .. ..	..	1	..	1	Coronary Thrombosis .. ..	5	3	..	8
Herpes Ophthalmicus .. ..	..	1	..	1	Aortitis (Syphilitic) .. ..	2	6	..	8
Iritis .. ..	..	1	..	1	Mesenteric Thrombosis .. ..	..	1	..	1
Glaucoma .. ..	..	1	..	1	Periarthritis Nodosa .. ..	..	..	1	1
Cataract .. ..	2	3	..	5	Aneurysm .. ..	1	..	..	1
Dacryocystitis .. ..	1	1	..	2	Angio-neurotic Oedema .. ..	..	1	..	1
Oedema of Eyelid .. ..	..	..	1	1	Angio-Spasm .. ..	1	..	..	1
	6	9	8	23	Intermittent Claudication .. ..	1	..	..	1
<b>DISEASES OF THE NOSE AND EAR :—</b>					Thrombo-phlebitis .. ..	5	14	..	19
Otitis Media .. ..	4	9	23	36	Varicose Veins .. ..	6	8	..	14
Aural Polypus .. ..	1	..	..	1	Purpura .. ..	..	1	1	2
Mastoiditis .. ..	4	2	6	12	Hæmorrhagic Diathesis .. ..	..	..	1	1
Menière's Disease .. ..	1	2	..	3	Hæmorrhagic Disease of new born .. ..	..	..	3	3
Cholesteatoma .. ..	1	..	..	1	Anæmia .. ..	2	4	3	9
Rhinitis .. ..	1	1	..	2	Microcytic Anæmia .. ..	..	5	..	5
Paroxysmal Rhinorrhœa .. ..	..	1	..	1	Secondary Anæmia .. ..	3	6	..	9
Naso-pharyngitis .. ..	..	..	1	1	Pernicious Anæmia .. ..	9	14	..	23
Nasal polypi .. ..	..	2	..	2	Aplastic Anæmia .. ..	1	..	..	1
Deflected septum .. ..	3	1	1	5	Hæmolytic Anæmia .. ..	..	..	1	1
Multiple Telangiectases of Nasal Septum .. ..	..	1	..	1	Acholuric Jaundice .. ..	..	1	..	1
Enlarged Turbinates .. ..	..	..	1	1	Myelogenous Leukæmia .. ..	1	2	..	3
Sinusitis .. ..	3	..	1	4	Lymphatic Leukæmia .. ..	..	1	..	1
Epistaxis .. ..	3	3	..	6	Splenomegaly .. ..	..	2	..	2
	21	22	33	76	Banti's Disease .. ..	1	..	..	1
<b>DISEASES OF THE THROAT :—</b>					Hodgkin's Disease .. ..	2	..	..	2
Tonsillitis .. ..	13	9	18	40	<b>DISEASES OF DIGESTIVE SYSTEM :—</b>				
Quinsy .. ..	4	9	3	16	Stomatitis .. ..	1	..	6	7
Enlarged tonsils and adenoids .. ..	5	6	113	124	Dental Caries and Pyorrhœa .. ..	5	11	4	20
Retropharyngeal Abscess .. ..	..	..	4	4	Parotitis .. ..	..	1	..	1
Laryngitis .. ..	1	..	1	2	Pharyngitis .. ..	3	1	3	7
	23	24	139	186	Dysphagia .. ..	1	..	..	1
					Oesophageal Diverticulum .. ..	..	1	..	1
					" Obstruction .. ..	1	..	..	1
					" Ulcer (perforated) .. ..	1	..	..	1

## DISEASES FROM WHICH PATIENTS SUFFERED.—(Continued).

DISEASE.	Men.	Women.	Children.	Total.	DISEASE.	Men.	Women.	Children.	Total.
<b>DISEASES OF DIGESTIVE SYSTEM—Continued.</b>					<b>DISEASES OF THE GENITO-URINARY SYSTEM—contd.</b>				
Congenital Hypertrophic Pyloric Stenosis .. ..	..	..	4	4	Bacilluria .. ..	1	2	..	3
Dyspepsia .. ..	27	21	9	57	Hæmaturia .. ..	4	3	1	8
Gastritis .. ..	5	4	1	10	Renal Calculus .. ..	13	4	..	17
Achlorhydria .. ..	2	2	..	4	Colic .. ..	11	3	..	14
Gastric Ulcer .. ..	26	15	..	41	Ureteric Calculus .. ..	3	2	..	5
Perforated Gastric Ulcer ..	11	5	..	16	Hydronephrosis .. ..	1	1	1	3
Hæmatemesis .. ..	7	9	..	16	Pyonephrosis .. ..	1	3	..	4
Duodenitis .. ..	2	..	..	2	Polycystic Disease of Kidneys ..	..	1	..	1
Periduodenitis .. ..	1	..	..	1	Renal Tumor .. ..	..	1	..	1
Duodenal Ulcer .. ..	61	8	..	69	Nephropotosis .. ..	..	1	..	1
Perforated Duodenal Ulcer ..	19	2	..	21	Cystitis .. ..	14	18	..	32
Jejunitis .. ..	..	1	..	1	Vesical Calculus .. ..	1	..	..	1
Perforated Jejunal Ulcer ..	..	..	..	1	Papilloma of Bladder .. ..	9	..	..	9
Enteritis .. ..	7	3	..	10	Retention of Urine .. ..	6	1	..	7
(Children) .. ..	..	..	93	93	Enlarged Prostate .. ..	60	..	..	60
Appendicitis .. ..	72	120	51	243	Prostatic Abscess .. ..	1	..	..	1
Diarrhoea .. ..	6	7	4	17	Urethral Calculus .. ..	1	..	..	1
Constipation .. ..	26	39	5	70	Stricture .. ..	16	..	..	16
Colitis .. ..	2	1	..	3	Periurethral Abscess .. ..	2	..	..	2
Ulcerative Colitis .. ..	3	8	..	11	Urethral Fistula .. ..	1	..	..	1
Diverticulosis .. ..	1	..	..	1	Phimosis .. ..	3	..	6	9
Diverticulitis .. ..	..	9	..	9	Paraphimosis .. ..	2	..	..	2
Fæcal Fistula .. ..	..	2	..	2	Balanitis .. ..	1	..	..	1
Rectal Polypus .. ..	..	1	..	1	Undescended Testis .. ..	3	..	..	3
Rectal Stricture .. ..	..	1	..	1	Epididymo-orchitis .. ..	2	..	1	3
Hæmorrhoids .. ..	39	10	..	49	Hydrocele .. ..	12	..	2	14
Fissure in Ano .. ..	2	1	..	3	Hæmatocele .. ..	2	..	..	2
Fistula in Ano .. ..	9	9	1	19	Varicocele .. ..	6	..	..	6
Prolapse of Anus .. ..	2	..	2	4	Menstruation .. ..	..	3	..	3
Catarrhal Jaundice .. ..	5	..	5	10	Menorrhagia .. ..	..	19	..	19
Obstructive Jaundice .. ..	1	1	..	2	Dysmenorrhœa .. ..	..	8	..	8
Chrysenic Jaundice .. ..	..	5	..	5	Metrorrhagia .. ..	..	3	..	3
Necrosis of Liver .. ..	1	..	1	2	Fibrosis Uteri .. ..	..	1	..	1
Cirrhosis of Liver .. ..	8	4	..	12	Endometriosis .. ..	..	1	..	1
Biliary Cirrhosis .. ..	..	1	..	1	Leucorrhœa .. ..	..	4	..	4
Cholangitis .. ..	1	..	..	1	Retroversion of Uterus .. ..	..	3	..	3
Portal obstruction .. ..	..	2	..	2	Procidentia .. ..	..	6	..	6
Gumma of Liver .. ..	..	1	..	1	Fibromyomata .. ..	..	9	..	9
Cholecystitis .. ..	17	32	..	49	Ovarian Cyst .. ..	..	18	..	18
Cholelithiasis .. ..	6	49	..	55	Ovarian Abscess .. ..	..	1	..	1
Pancreatitis .. ..	1	7	..	8	Fimbrial Cyst .. ..	..	1	..	1
Adenoma of Pancreas .. ..	..	1	..	1	Salpingitis .. ..	..	34	..	34
Abdominal Pain and Colic ..	15	22	15	52	Pyosalpinx .. ..	..	10	..	10
Peritoneal Adhesions .. ..	3	11	..	14	Vulvo-Vaginitis .. ..	..	3	2	5
General Peritonitis .. ..	1	2	..	3	Trichomonas Vaginalis .. ..	..	1	..	1
Pneumococcal Peritonitis ..	2	1	1	4	Foreign body in vagina .. ..	..	1	..	1
Sub-phrenic abscess .. ..	4	..	..	4	Entero-uterine fistula .. ..	..	1	..	1
Peritoneal Fistula .. ..	1	..	..	1	Cyst of Urachus .. ..	1	..	..	1
Intussusception .. ..	..	..	2	2	Enuresis .. ..	2	..	4	6
Volvulus .. ..	..	3	..	3		222	235	56	513
Food (Fish) Poisoning .. ..	1	..	..	1	<b>DISEASES OF THE SKIN:—</b>				
Swallowed foreign body .. ..	1	..	2	3	Acne Varioliformis .. ..	..	1	..	1
Hernia, Inguinal .. ..	114	11	18	143	Vulgaris .. ..	1	..	..	1
Femoral .. ..	9	23	..	32	Carbuncle .. ..	38	19	..	57
Epigastric .. ..	5	..	..	5	Dermatitis .. ..	3	3	4	10
Umbilical .. ..	2	17	2	21	Actinic .. ..	..	2	..	2
Incisional .. ..	2	9	..	11	Chrysogenic .. ..	2	2	..	4
Tapeworm .. ..	..	1	..	1	Exfoliative .. ..	1	1	..	2
Thread Worms .. ..	..	..	1	1	Exogenic .. ..	..	2	..	2
	543	503	230	1,276	Exposure .. ..	1	..	..	1
<b>DISEASES OF THE GENITO-URINARY SYSTEM:—</b>					Follicular .. ..	2	..	..	2
Albuminuria .. ..	..	..	1	1	Herpetiformis .. ..	2	..	..	2
Phosphaturia .. ..	1	1	..	2	Medicamentosa .. ..	..	1	..	1
Oxaluria .. ..	1	1	..	2	Toxic .. ..	1	..	..	1
Nephritis .. ..	34	35	17	86	Eczema .. ..	24	15	14	53
Pyelonephritis .. ..	1	1	..	2	Infantile .. ..	..	..	20	20
Pyelitis .. ..	6	30	21	57	Psychogenic .. ..	1	1	1	3
					Seborrhœic .. ..	12	5	7	24
					Lichenified .. ..	..	..	1	1
					Gravitational .. ..	2	2	..	4



## DISEASES FROM WHICH PATIENTS SUFFERED.—(Continued).

DISEASE.	Men.	Women.	Children.	Total.	DISEASE	Men.	Women.	Children.	Total.
<b>DISEASES OF THE SKIN—</b>					<b>SEPTIC INFECTION—continued.</b>				
<i>continued.</i>					Abcess :—				
Erythema Herpes Iris ..	..	..	1	1	Perinephric .. ..	2	..	1	3
Erythema Multiforme ..	..	1	1	2	Testis .. ..	1	..	..	1
Toxic .. ..	..	2	3	5	Scrotum .. ..	1	..	1	2
Folliculitis Barbæ ..	1	..	2	3	Bartholin's .. ..	..	2	..	2
Furunculosis .. ..	6	6	2	14	Sacro-Coccygeal .. ..	..	2	..	2
Herpes .. ..	2	1	..	3	Ischio-Rectal .. ..	16	7	..	23
Impetigo .. ..	6	2	48	56	Pelvic .. ..	1	3	..	4
Onychogryphosis ..	1	1	..	2	Adenitis .. ..	27	12	54	93
Painful Scar .. ..	1	2	..	3	Cellulitis .. ..	29	27	8	64
Papilloma .. ..	1	2	..	3		159	80	135	374
Pediculosis and Vermin Rash	7	4	3	14	<b>MISCELLANEOUS :—</b>				
Pemphigus Foliaceus ..	..	1	..	1	Adenomatous Goitre ..	..	3	..	3
Pityriasis Capitis ..	..	..	1	1	Colloid Goitre .. ..	..	1	..	1
Plantar Corns .. ..	..	1	..	1	Hyperthyroidism .. ..	..	7	..	7
Pompholyx .. ..	1	..	..	1	Thyrototoxicosis .. ..	4	24	..	28
Pruritus .. ..	2	2	..	4	Myxœdema .. ..	..	2	..	2
Psoriasis .. ..	7	4	3	14	Pituitary Dysfunction ..	..	..	1	1
Ringworm .. ..	..	..	2	2	Diabetes Mellitus .. ..	25	48	1	74
Rosacea .. ..	1	1	..	2	Glycosuria .. ..	1	1	..	2
Scabies .. ..	21	8	30	59	Hypoglycæmic Coma ..	1	..	..	1
Scleroderma .. ..	1	..	1	2	Erythema Nodosum ..	1	9	1	11
Sebaceous Cysts .. ..	1	2	..	3	Polyarthritis, Toxic ..	14	7	2	23
Sudamina .. ..	1	..	..	1	Gout .. ..	..	1	..	1
Sycosis .. ..	7	..	..	7	Acidosis .. ..	..	1	..	1
Ulcer .. ..	28	21	2	51	Rickets .. ..	..	..	6	6
Urticaria .. ..	1	3	2	6	Spasmophilia .. ..	..	2	1	3
	186	118	146	450	Obesity .. ..	..	5	..	5
<b>DISEASES OF BONES &amp; JOINT—</b>					Malnutrition (Nutritional				
Bursitis .. ..	21	10	3	34	Disorder) .. ..	..	2	20	22
Synovitis .. ..	4	..	4	8	Pink Disease .. ..	..	..	3	3
Loose bodies .. ..	2	2	..	4	Debility .. ..	13	40	25	78
Torn Internal Smailunar					" Collapse " .. ..	24	9	1	34
Cartilage .. ..	14	..	..	14	Menopausal Debility ..	..	11	..	11
Torn Internal Lateral					Viscerotoposis .. ..	..	3	..	3
Ligament .. ..	..	1	..	1	Tetanus .. ..	1	..	1	2
Septic Arthritis .. ..	3	1	2	6	Mastitis, Chronic .. ..	2	9	..	11
Osteomyelitis .. ..	2	..	14	16	Cysticercosis .. ..	1	..	..	1
Necrosis of Bone .. ..	5	2	4	11	Lipoma .. ..	1	2	..	3
Osteitis .. ..	3	1	..	4	Abdominal Tumour (simple)	3	..	..	3
Paget's Disease .. ..	2	1	..	3	Glabellar Cyst .. ..	..	1	..	1
Osteomalacia .. ..	..	1	..	1	Coccygeal cyst .. ..	..	2	..	2
Scoliosis .. ..	..	5	..	5	" fistula .. ..	1	1	..	2
Talipes .. ..	1	1	..	2	Coccygodynia .. ..	..	2	..	2
Flat Foot .. ..	2	1	..	3	Cleft Palate .. ..	..	1	1	2
Metatarsalgia .. ..	1	..	..	1	Transposition of Viscera	1	..	..	1
Hallux Valgus .. ..	3	4	..	7	Hæmorrhage from umbilical				
Hammer Toe .. ..	1	1	..	2	cord .. ..	..	..	1	1
Ingrowing Toe Nail ..	2	2	..	4	Post-extraction hæmorrhage	2	1	..	3
Dupuytren's Contracture	1	..	..	1	Fitting of artificial leg ..	1	..	..	1
Contracture of fingers ..	1	2	..	3	Unexplained Fever (P.U.O.)	2	4	6	12
Rigger Thumb .. ..	..	..	1	1	Prematurity .. ..	..	..	40	40
Pericollitis .. ..	1	..	1	2	Debility from Birth ..	..	..	20	20
Cervical Rib .. ..	..	1	..	1	With Mother .. ..	..	..	10	10
Ossification of Vth Lumbar					No disease .. ..	21	8	26	55
Vertebra .. ..	..	1	..	1		119	207	166	492
Charcot's Joint .. ..	1	..	..	1	<b>PATIENTS DISCHARGED FROM</b>				
	70	37	29	136	MATERNITY WARD AND				
<b>SEPTIC INFECTIONS :—</b>					NOT INCLUDED ELSEWHERE:				
Fingers .. ..	11	4	6	21	Delivered in Hospital ..	..	1,003	..	1,003
Hands .. ..	14	1	1	16	" before admission ..	..	30	..	30
Feet .. ..	3	2	1	6	Children born in Hospital	..	..	940	940
" .. ..	11	2	3	16	" before Admission ..	..	..	28	28
Abscess :—					Undelivered (apparently				
Face, Head and Neck ..	21	8	39	68	normal, but not in labour)	..	80	..	80
Upper Extremity .. ..	3	1	1	5		..	1,113	968	2,081
Lower Extremity .. ..	18	8	20	46		3,500	4,757	2,727	10,984
Chest Wall .. ..	1	..	..	1	<b>TOTAL .. ..</b>				
Abdominal Wall .. ..	..	1	..	1					

**Deaths.**—The number of deaths was 1,615, this being an increase of 142 over the previous year. The age groups up to 45 showed a decrease of 38 whilst those over 65 showed an increase of 95. The number of deaths occurring within 24 hours of admission was 207 and a further 96 took place within the second 24 hours. The corresponding figures for 1935 were 204 and 107. There has been no decrease in the number of patients sent in for whom it was obvious that there was no hope of recovery.

## DEATHS IN AGE GROUPS.

Under 1 year	..	..	170
1-2 years	..	..	28
2-5	..	..	31
5-15	..	..	34
15-25	..	..	52
25-35	..	..	74
35-45	..	..	98
45-55	..	..	203
55-65	..	..	321
65-75	..	..	379
75-85	..	..	186
85 and over	..	..	39
All ages	..	..	1,615

## DEATHS IN QUARTERS.

	Men.	Women.	Children.	Total.
1st Quarter	215	164	85	464
2nd "	180	173	73	426
3rd "	164	138	36	338
4th "	154	156	77	387
Year	713	631	271	1,615



# ST. JAMES'S HOSPITAL.

## CAUSES OF DEATH.

DISEASE.	Men.	Women.	Children.	Total.	DISEASE.	Men.	Women.	Children.	Total.
<b>INFECTIOUS DISEASES :—</b>					<b>VENEREAL DISEASE :—</b>				
Cerebro-spinal Fever ..	5	1	5	11	Congenital Syphilis ..	..	..	4	4
Diphtheria ..	1	..	2	3					
Erysipelas ..	1	3	2	6					
Measles ..	..	..	12	12	<b>PUERPERAL FEVER ..</b>	..	3	..	3
Scarlet Fever ..	..	..	1	1					
Whooping Cough ..	..	..	9	9					
	7	4	31	42	<b>OTHER DISEASES AND</b>				
<b>INFLUENZA .. ..</b>	..	1	..	1	<b>ACCIDENTS CONNECTED WITH</b>				
					<b>PREGNANCY AND CHILD-</b>				
<b>TUBERCULOSIS :—</b>					<b>BIRTH :—</b>				
Pulmonary ..	26	8	2	36	Abortion ..	..	6	..	6
					Acute Liver Necrosis ..	..	1	..	1
<b>Non-Pulmonary :—</b>					Placenta Prævia ..	..	1	..	1
Bones and Joints ..	..	2	..	2	Post-partum hæmorrhage ..	..	2	..	2
Meninges ..	2	2	10	14	Acute Confusional Insanity ..	..	2	..	2
Genito-Urinary ..	1	..	..	1	Breast Abscess ..	..	1	..	1
Intestines ..	1	..	..	1					
Peritoneum ..	..	1	1	2					
Miliary ..	3	1	3	7					
Pericardium ..	..	..	1	1					
	7	6	15	28	<b>MENTAL DISEASES :—</b>				
<b>MALIGNANT DISEASE :—</b>					Amentia ..	..	..	2	2
Cancer of Larynx ..	1	1	..	2	Confusional Insanity ..	..	1	..	1
" Bronchus ..	21	4	..	25	Toxic Psychosis ..	..	1	..	1
" Jaw ..	2	..	..	2	Dementia Paralytica ..	2	1	..	3
" Maxillary					Tabo-Paresis ..	1	..	..	1
Antrum ..	..	1	..	1					
" Parotid ..	1	..	..	1	<b>ACCIDENTAL INJURY AND</b>				
" Mouth ..	2	1	..	3	<b>VIOLENCE :—</b>				
" Tongue ..	8	..	..	8	Fractures :—				
" Pharynx ..	2	..	..	2	Skull ..	3	..	..	3
" Oesophagus ..	9	3	..	12	Humerus ..	..	1	..	1
" Stomach ..	21	12	..	33	Spine ..	1	1	..	2
" Cæcum ..	..	1	..	1	Pelvis ..	..	1	..	1
" Colon ..	21	16	..	37	Femur ..	2	20	..	22
" Rectum ..	6	4	..	10	Fibula ..	1	..	..	1
" Liver ..	2	1	..	3	Tibia and Fibula ..	1	..	..	1
" Gall Bladder ..	..	1	..	1	Multiple ..	..	1	..	1
" Common Bile Duct	1	1	..	2	Dislocated Shoulder ..	1	..	..	1
" Pancreas ..	4	4	..	8	Traumatic Cerebral				
Abdominal Carcinomatosis	12	5	..	17	Hæmorrhage ..	5	..	..	5
Cancer of Kidney ..	2	..	..	2	Traumatic Cerebral Softening	..	..	1	1
" Bladder ..	2	2	..	4	Traumatic Peritonitis ..	..	1	..	1
" Prostate ..	10	..	..	10	Concussion ..	1	1	..	2
" Penis ..	1	..	..	1	Spinal Concussion ..	1	..	..	1
" Breast ..	..	14	..	14	Burns and Scalds ..	1	3	2	6
" Ovary ..	..	4	..	4	Bruises ..	2	1	..	3
" Uterus ..	..	17	..	17	Wounds ..	..	..	1	1
" Skin ..	3	..	..	3	Asphyxia ..	..	..	1	1
Sarcoma of Uterus ..	..	1	..	1	Narcotic poisoning ..	..	1	..	1
Sarcoma of Bone ..	..	1	..	1	Alcoholism ..	2	2	..	4
Melanotic Sarcoma ..	1	1	..	2					
Cerebral Tumour ..	3	2	1	6					
	135	97	1	233	<b>NERVOUS SYSTEM :—</b>				
<b>RHEUMATISM :—</b>					Cerebral Aneurysm ..	1	1	..	2
1. Acute types :—					" Hæmorrhage ..	13	17	..	30
Acute Rheumatism ..	..	..	2	2	" Thrombosis ..	38	23	..	61
Rheumatic Carditis ..	..	1	5	6	" Cortical Atrophy ..	5	5	..	10
					" Abscess ..	2	..	1	3
2. Non-articular types ..	..	1	7	8	Cyst of Pituitary ..	1	..	..	1
					Paralysis Agitans ..	1	1	..	2
3. Chronic Arthritis :—					Post-encephalitic Parkinson-				
Osteo-arthritis ..	1	..	..	1	ism ..	..	2	..	2
Rheumatic Arthritis ..	2	4	..	6	Epilepsy ..	3	3	1	7
					Convulsions ..	..	..	1	1
	3	4	..	7	Pneumococcal Meningitis ..	..	..	1	1
					Locomotor Ataxia ..	1	1	..	2

## CAUSES OF DEATH.—(Continued).

DISEASE.	Men.	Women.	Children.	Total.	DISEASE.	Men.	Women.	Children.	Total.
<b>NERVOUS SYSTEM—continued.</b>					<b>DIGESTIVE SYSTEM—continued</b>				
Freidreich's Ataxia .. ..	..	1	..	1	Necrosis of Liver .. ..	1	..	1	2
Disseminated Sclerosis ..	1	3	..	4	Cirrhosis of Liver .. ..	2	4	..	6
Spina Bifida .. ..	..	..	4	4	Cholangitis .. ..	1	..	..	1
Progressive Muscular	..	..	..	..	Cholecystitis .. ..	1	3	..	4
Dystrophy .. ..	1	..	..	1	Cholelithiasis .. ..	2	4	..	6
Polyneuritis .. ..	..	1	..	1	Pancreatitis .. ..	1	1	..	2
Neurofibromatosis .. ..	..	2	..	2	Adenoma of Pancreas ..	..	1	..	1
	67	60	8	135	Peritoneal Adhesions ..	..	2	..	2
<b>DISEASES OF NOSE AND EAR:—</b>					General Peritonitis ..	..	1	..	1
Otitis Media .. ..	3	..	1	4	Pneumococcal Peritonitis	2	1	1	4
Mastoiditis .. ..	1	2	..	3	Sub-phrenic Abscess ..	1	..	..	1
Cholesteatoma .. ..	1	..	..	1	Intussusception .. ..	..	..	2	2
Retropharyngeal Abscess ..	..	..	1	1	Volvulus .. ..	..	2	..	2
	5	2	2	9	Inguinal Hernia .. ..	4	..	..	4
<b>RESPIRATORY SYSTEM:—</b>					Femoral Hernia .. ..	1	2	..	3
Bronchitis .. ..	35	21	2	58	Unbilical Hernia .. ..	..	3	..	3
Broncho-pneumonia .. ..	26	28	46	100		50	48	58	156
Lobar Pneumonia .. ..	34	16	3	53	<b>GENITO-URINARY SYSTEM:—</b>				
Empyema, pneumococcal ..	5	2	3	10	Nephritis .. ..	19	19	1	39
streptococcal .. ..	1	..	..	1	Pyelo-nephritis .. ..	..	1	..	1
Abscess of Lung .. ..	2	1	..	3	Pyelitis .. ..	..	..	5	5
Gangrene of Lung .. ..	1	..	..	1	Renal Calculus .. ..	2	1	..	3
Fibrosis of Lung .. ..	1	..	..	1	Pyonephrosis .. ..	1	1	..	2
Bronchiectasis .. ..	9	2	..	11	Cystitis .. ..	3	5	..	8
Asthma .. ..	2	..	..	2	Enlarged Prostate .. ..	27	..	..	27
Suppurative Mediastinitis ..	..	..	1	1	Urethral Stricture .. ..	6	..	..	6
	116	70	55	241	Ovarian Cyst. .. ..	..	1	..	1
<b>CIRCULATORY SYSTEM:—</b>					Salpingitis .. ..	..	1	..	1
Pericarditis .. ..	2	..	1	3	Pyosalpinx .. ..	..	2	..	2
Acute Endocarditis .. ..	1	1	..	2	Entero-Uterine Fistula ..	..	1	..	1
Infective Endocarditis ..	1	6	1	8		58	32	6	96
Valvular Heart Disease ..	20	18	2	40	<b>DISEASES OF THE SKIN:—</b>				
Congenital Heart Lesion ..	..	..	3	3	Carbuncle .. ..	2	2	..	4
Cardiac Myopathy .. ..	78	67	..	145	Dermatitis, Septic .. ..	..	..	1	1
Arterio-Sclerosis .. ..	81	109	..	190	Chrysogenic .. ..	1	..	..	1
Hyperpiesia .. ..	..	1	..	1	Exfoliative .. ..	..	1	..	1
Coronary Thrombosis .. ..	3	1	..	4	Infantile Eczema .. ..	..	..	1	1
Aortitis (Syphilitic) .. ..	1	5	..	6	Toxic Erythema .. ..	..	1	..	1
Mesenteric Thrombosis ..	..	1	..	1	Pemphigus Foliaceus ..	..	1	..	1
Aneurysm .. ..	1	..	..	1		3	5	2	10
Thrombo-phlebitis .. ..	..	2	..	2	<b>DISEASES OF BONES AND</b>				
Varicose Veins .. ..	..	1	..	1	<b>JOINTS:—</b>				
Hæmorrhagic Disease of	..	..	1	1	Septic arthritis .. ..	2	..	..	2
New Born .. ..	..	..	1	1	Osteomyelitis .. ..	1	..	5	6
Pernicious Anæmia .. ..	2	1	..	3	Paget's Disease .. ..	1	..	..	1
Aplastic Anæmia .. ..	1	..	..	1		4	..	5	9
Acholic Jaundice .. ..	..	1	..	1	<b>SEPTIC INFECTIONS:—</b>				
Myelogenous Leukæmia ..	1	1	..	2	Septic Hand .. ..	1	..	..	1
Lymphatic Leukæmia .. ..	..	1	..	1	Cervical Abscess .. ..	..	..	2	2
Banti's Disease .. ..	1	..	..	1	Ischio-Rectal Abscess ..	..	1	..	1
	193	216	8	417	Pelvic Abscess .. ..	..	1	..	1
<b>DIGESTIVE SYSTEM:—</b>					Cellulitis .. ..	3	6	..	9
Ulcerative Stomatitis .. ..	..	..	1	1		4	8	2	14
Oral Sepsis .. ..	1	..	..	1	<b>MISCELLANEOUS:—</b>				
Suppurative Parotitis .. ..	..	1	..	1	Hyperthyroidism .. ..	..	1	..	1
Gangrenous Pharyngitis ..	1	..	..	1	Thyrotoxicosis .. ..	..	5	..	5
Perforated Oesophageal Ulcer	1	..	..	1	Diabetes Mellitus .. ..	10	10	..	20
Congenital Hypertrophic	..	..	1	1	Toxic Polyarthrits .. ..	..	1	..	1
Pyloric Stenosis .. ..	..	..	1	1	Rickets .. ..	..	..	1	1
Gastric Ulcer .. ..	4	5	..	9	Pink Disease .. ..	..	..	1	1
Perforated Gastric Ulcer ..	9	4	..	13	Tetanus .. ..	1	..	..	1
Duodenal Ulcer .. ..	4	2	..	6	Prematurity .. ..	..	..	38	38
Perforated Duodenal Ulcer ..	9	1	..	10	Debility from Birth.. ..	..	..	18	18
Enteritis (Infantile diarrhoeal	..	..	50	50		11	17	58	86
diseases) .. ..	..	2	2	9		713	631	271	1,615
Appendicitis .. ..	5	..	..	5					
Ulcerative Colitis .. ..	..	6	..	6					
Diverticulitis .. ..	..	3	..	3					

## DEATHS OF CHILDREN UNDER 1 YEAR—1936.

Cause of Death.	No. of Deaths.
Prematurity .. .. .	38
Debility from Birth .. .. .	18
Spina Bifida .. .. .	4
Congenital Valvular Heart Lesion .. .. .	1
„ Hypertrophic Pyloric Stenosis .. .. .	1
„ Syphilis .. .. .	4
Bronchitis .. .. .	2
Broncho-pneumonia .. .. .	23
Lobar Pneumonia .. .. .	1
Hæmorrhagic disease of new born .. .. .	1
Ulcerative Stomatitis .. .. .	1
Enteritis (Diarrhœal diseases) .. .. .	47
Pneumococcal Peritonitis .. .. .	1
Necrosis of Liver .. .. .	1
Intussusception .. .. .	2
Pyelitis .. .. .	5
Infantile Eczema .. .. .	1
Septic dermatitis .. .. .	1
Abscess .. .. .	2
Wounds .. .. .	1
Scalds .. .. .	1
Asphyxia .. .. .	1
Pink disease .. .. .	1
Tuberculous Meningitis .. .. .	1
Miliary Tuberculosis .. .. .	1
Cerebro-Spinal Fever .. .. .	2
Erysipelas .. .. .	1
Measles .. .. .	3
Whooping Cough .. .. .	4
Total .. .. .	170

**Medical Work.**—No epidemics occurred during the year and influenza was again a negligible feature. A perusal of the statistical part of the report will suffice to indicate the very large variety of cases treated. The large numbers admitted make it inevitable that the least common conditions are represented in the wards of the hospital. As has been previously pointed out, the material for teaching is enormous and offers unique possibilities which should not be overlooked.

**Surgical Work.**—A further increase in the number of operations falls to be recorded, the number having risen from 2,004 to 2,304. In addition, 331 cases of minor importance, such as cystoscopy, application of plaster and splints, and procedures requiring no anaesthetic were dealt with in the theatre. Blood transfusions were carried out to the number of 59, in 48 of which the donors were obtained from the Leeds Blood Transfusion Service.

A noteworthy feature was the much larger number of cases of injury admitted, partly directly, but mostly as a result of co-operation with the Casualty Department of the General Infirmary. The comparative figures were 682 in 1936, and 462 in 1935, of which 364 and 210 respectively were cases of fracture of the bones. An increase of 128 cases of fractures of the lower limbs was the chief factor in the rise. In December an out-patient clinic was begun, held weekly, to enable cases treated in the hospital to be followed up, their progress noted, and any unsatisfactory developments remedied. With modern methods a very much shorter in-patient stay is required in a large proportion of the cases, which makes subsequent supervision all the more necessary. The pressure of work in the operating theatre is very heavy and shows no sign of relaxing. On the contrary it continues to grow and the need for further theatre accommodation becomes every year more apparent.

## ST. JAMES'S HOSPITAL.

## OPERATIONS PERFORMED DURING 1936.

OPERATIONS PERFORMED.		OPERATIONS PERFORMED.	
<b>ABDOMINAL OPERATIONS :—</b>		Cystoscopy (under general anæsthesia) .. .. .	
Appendicectomy .. .. .	248	Cystotomy (vaginal) .. .. .	5
For Appendix Abscess .. .. .	3	Dilatation and Curettage .. .. .	1
Cæcostomy .. .. .	10	Evacuation of Uterus .. .. .	31
" Closure of .. .. .	1	Excision of Cervical Polyp .. .. .	97
Cæsarean Section .. .. .	18	" " Vulva .. .. .	1
Cholecystectomy .. .. .	56	For Hydrocele .. .. .	1
Cholecyst-gastrostomy .. .. .	3	" Undescended Testis .. .. .	9
Cholecystotomy .. .. .	8	" Urethral Calculus .. .. .	2
Choledochotomy .. .. .	2	" Varicocele .. .. .	4
Colectomy .. .. .	1	Nephrectomy .. .. .	6
Colostomy .. .. .	16	Nephrolithotomy .. .. .	12
" Closure of .. .. .	2	Nephrotomy .. .. .	2
Gastrostomy (Partial) .. .. .	9	Nephrotomy .. .. .	1
Gastrostomy .. .. .	3	Orchidectomy .. .. .	11
Undoing Gastrostomy .. .. .	1	Perinephric Abscess, Drainage .. .. .	5
Gastro-enterostomy .. .. .	23	Prostatectomy .. .. .	12
Jejunostomy .. .. .	2	Suprapubic Cystotomy .. .. .	48
Undoing Jejunostomy .. .. .	1	Trachelorrhaphy .. .. .	1
Laparotomy (Exploratory) .. .. .	15	Urethral Stricture, Dilatation .. .. .	10
Laparotomy for :—		Vaginal Hysterectomy .. .. .	1
Carcinoma of Colon .. .. .	21	" Hysterotomy .. .. .	1
" " Gall Bladder .. .. .	1	Ventro Suspension of Uterus .. .. .	1
" " Stomach .. .. .	1		291
Diverticulitis .. .. .	3	<b>OPERATIONS ON EYE, EAR, NOSE AND THROAT :—</b>	
Endothelioma Peritonei .. .. .	1	Adenotonsillectomy .. .. .	162
Intussusception .. .. .	2	Cauterisation of Turbinates .. .. .	1
Perforation of Duodenal Ulcer .. .. .	18	Drainage of Cerebral Abscess .. .. .	3
" " Gastric Ulcer .. .. .	10	Excision of Aural Polypus .. .. .	2
" " Jejunal Ulcer .. .. .	1	" " Nasal Polypus .. .. .	4
" " Uterus .. .. .	1	" " Eye .. .. .	4
Peritoneal Adhesions .. .. .	8	Incision of Lacrymal Sac .. .. .	4
Peritonitis .. .. .	15	Mastoidectomy .. .. .	4
Resection of Intestine .. .. .	3	Mastoidotomy .. .. .	10
Ruptured Ectopic Gestation .. .. .	10	Submucous resection of Nasal Septum .. .. .	7
Subphrenic Abscess .. .. .	4	Tarsorrhaphy .. .. .	1
Tuberculous Mesenteric Glands .. .. .	1	Tracheotomy .. .. .	1
" Peritonitis .. .. .	1		203
" Volvulus .. .. .	1	<b>CHEST OPERATIONS :—</b>	
Resuture of Abdominal Wound .. .. .	7	Exploration of Lung Abscess .. .. .	2
Splenectomy .. .. .	1	Intercostal Drainage for Empyema .. .. .	1
Hysterectomy .. .. .	13	Partial Lobectomy .. .. .	2
Myomectomy .. .. .	1	Phrenic Crush .. .. .	2
Oöphorectomy .. .. .	11	Phrenic Evulsion .. .. .	20
Salpingectomy .. .. .	14	Rib resection for Empyema .. .. .	36
Salpingo-oöphorectomy .. .. .	13	Thoracoplasty .. .. .	11
	584		74
<b>OPERATIONS FOR HERNIA :—</b>		<b>DRAINAGE OF ABSCESSES :—</b>	
Epigastric Hernia .. .. .	5	Abdominal Wall .. .. .	1
Femoral Hernia .. .. .	22	Axilla .. .. .	19
Strangulated Femoral Hernia .. .. .	9	Breast .. .. .	26
Incisional Hernia .. .. .	3	Chest Wall .. .. .	4
Strangulated Incisional Hernia .. .. .	2	Face and Head .. .. .	26
Inguinal Hernia .. .. .	127	Iscbio-rectal .. .. .	29
Strangulated Inguinal Hernia .. .. .	9	Lower Extremity .. .. .	86
Umbilical Hernia .. .. .	11	Lumbar .. .. .	1
Strangulated Umbilical Hernia .. .. .	4	Neck .. .. .	85
	192	Sacro coccygeal .. .. .	5
<b>GENITO-URINARY OPERATIONS :—</b>		Upper Extremity .. .. .	36
Amputation of Uterine Cervix .. .. .	1		318
Bartolin's Abscess (incision) .. .. .	2		
Circumcision .. .. .	9		
Colpotomy .. .. .	3		
Colpo-perineorrhaphy .. .. .	10		
Cystectomy (Partial) .. .. .	1		
Cysto-diatrmy .. .. .	2		



## OPERATIONS PERFORMED DURING 1936.—(Continued).

OPERATIONS PERFORMED.		OPERATIONS PERFORMED.	
<b>RECTAL OPERATIONS :—</b>		Manipulation and application of plaster .. .. .	
Excision of Fistula-in-Ano ..	13	Osteotomy .. .. .	2
" " Haemorrhoids .. ..	39	Reduction of dislocated elbow ..	1
For Fissure in Ano .. ..	5	" " shoulder .. ..	2
Proctoscopy .. .. .	2	Sequestrectomy .. .. .	8
Removal of foreign body from rectum .. .. .	1	Suture of ruptured quadriceps ..	1
Resection of rectum .. ..	3	Steindler's Operation .. ..	1
	63	Stoefel's Operation .. ..	1
		Tenotomy .. .. .	3
		Transplantation of Ulnar Nerve ..	1
<b>AMPUTATIONS :—</b>			323
Of Finger .. .. .	14	<b>OPERATIONS ON THE SKULL, BRAIN AND NERVES :—</b>	
" Foot .. .. .	5	Cerebral Decompression .. ..	8
" Leg .. .. .	16	Epidural Injection .. ..	1
" Stump .. .. .	1	Excision of Cerebral Tumour ..	1
" Toe .. .. .	3	" " Pituitary Tumour .. ..	2
	39	Injection of Trigeminal Nerve ..	2
		Supraorbital Neurectomy .. ..	1
<b>ORTHOPÆDIC OPERATIONS :—</b>		Ventriculography .. .. .	3
Application of Plaster .. ..	31		18
Arthrodesis of Ankle .. ..	1	<b>MISCELLANEOUS OPERATIONS :—</b>	
" " Hip .. .. .	1	Avulsion of Nail .. .. .	6
" " Shoulder .. ..	1	Curettage of Tuberculous Glands ..	8
Arthrotomy of Hip .. ..	4	" " Venereal Warts .. ..	1
" Knee .. .. .	1	Examination under anaesthesia ..	10
Excision of Coccyx .. ..	2	Excision of Breast .. .. .	19
" " Head of Femur .. ..	1	" " Cervical Rib .. ..	1
" " Metatarsal .. ..	2	" " Coccygeal Sinus .. ..	2
" " Head of Radius .. ..	1	" " Cyst of Breast .. ..	2
" " Scaphoid .. .. .	1	" " Ganglion .. .. .	1
For Osteomyelitis of Femur ..	10	" " Glands (Tuberculous) ..	8
" " " Humerus .. ..	2	" " Lipoma .. .. .	3
" " " Jaw .. .. .	1	" " Papilloma .. ..	3
" " " Pubis .. .. .	1	" " Scar .. .. .	3
" " " Tibia .. .. .	14	" " Thyroid .. .. .	22
For Fractured Femur .. ..	1	" " Tumour of Arm .. ..	1
" " Humerus .. .. .	1	" " Ulcer .. .. .	1
" " Patella .. .. .	6	" " Varicose Veins .. ..	9
" " Radius .. .. .	2	Extraction of Teeth .. ..	3
" " Spine .. .. .	1	Incision of Caruncle .. ..	31
" " Ulna .. .. .	4	" " Prepatellar Bursitis ..	26
" Hallux Valgus .. .. .	6	Ligature of Internal Jugular Vein ..	1
" Hallux Rigidus .. .. .	1	Removal of foreign body from hand ..	2
" Torn Semilunar Cartilage ..	15	Repair of Cleft Palate .. ..	2
" Trigger Thumb .. .. .	1	Skin Grafting .. .. .	2
Hibb's Spinal Fusion .. ..	4	Suture of Cut Tendon .. ..	1
Insertion of Hey Groves Pin ..	7	Suture of Wound of Arm .. ..	4
" " Kirschner Wire .. ..	5	" " " Face .. .. .	9
" " Os Calcis Pin .. ..	4	" " " Leg .. .. .	1
" " Smith Petersen's Pin ..	2	" " " Scalp .. ..	3
Laminectomy .. .. .	3	" " " Throat .. ..	1
Lengthening of Tendo Achillis ..	2	Toilet of Burns .. .. .	14
Manipulation of Cervical Spine ..	1		199
" " Elbow .. .. .	1		
" " Fracture (various) ..	95		
" " Hand .. .. .	4		
" " Hip .. .. .	1		
" " Knee .. .. .	3		
" " Sacro'liac Joint .. ..	2		
		<b>TOTAL .. .. .</b>	<b>2,304</b>

**Children's Wards.**—During the year 1,787 children were admitted, an increase of 24 over 1935. The number of live births was 987, so that altogether 2,774 children passed through the hospital. The number of deaths occurring in children under one year was 170, an increase of five over the previous year. There was a definite increase in the number of deaths from broncho-pneumonia, there being 23 as opposed to 14 in the previous year. The deaths from "gastro-enteritis" numbered 47, which was an increase of 12 over the previous year, and was one less than in 1934. The death-rate from this disease was practically 50 per cent. The type of case was rather more severe than in the previous year. This disease presents a great problem; it assumes much variety of form and severity, and one wonders at times whether the diarrhoea, which is the most striking feature, is a symptom of intestinal infection of a primary nature or simply part of a general infection. Whatever the cause, it remains a recurring source of anxiety. There would appear to be little doubt that improved hygienic conditions have lessened the incidence. Perhaps when all housing problems have been solved, and all food is kept free from contamination, and a uniformly high standard of personal and domestic hygiene prevails, it may disappear.

**Maternity Department.**—Labours conducted during 1936 numbered 1,040, being an increase of 50 over the previous year. There were 66 stillbirths, 13 cases of twins, and a total number of live births of 987. Of the births, 107, or just over 10 per cent. were illegitimate. In addition to those confined in hospital, 34 women were admitted immediately following delivery. There were 8 maternal deaths, one of them an outside case confined before admission and another a woman with advanced heart disease who died before labour commenced. Excluding these two cases the equivalent maternal mortality rate for the year was 6.08 per 1,000 live births.

Major causes of abnormality were :—

Ante-partum haemorrhage	..	..	25
Post-partum haemorrhage	..	..	21
Eclampsia .. .. .	..	..	3



Abnormalities of presentation and position included :—

Breech	..	..	..	..	..	53
Face	..	..	..	..	..	3
Persistent occipito-posterior	..	..	..	..	..	16

Caesarean section was performed in 18 cases, the indications being :—

Small pelvis	..	..	..	..	..	6
Flat pelvis	..	..	..	..	..	2
Oblique pelvis	..	..	..	..	..	1
Rickety Pelvis	..	..	..	..	..	3
Heart disease in mother	..	..	..	..	..	2
Age of mother (1st child, in abnormal position)	..	..	..	..	..	2
Transverse lie	..	..	..	..	..	2

Forceps were applied in 61 instances. Induction was carried out in 28 cases, 17 by medical and 11 by surgical means. The number of premature births was 119, this being 30 less than last year. Blood transfusion was carried out in 5 instances. Puerperal pyrexia was notified in 36 cases and puerperal fever in one. Two cases of puerperal confusional insanity occurred.

Particulars of the Maternal deaths were as follows :—

1 Peritonitis following Caesarean section. This was a straightforward case of Caesarean section for oblique pelvis. Peritonitis set in and although a drainage operation was carried out five days after the first operation, the patient died at the end of 14 days.

2 Uterine inertia with post-partum haemorrhage, following a normal delivery. Patient slowly became weaker in spite of all measures.

3 Similar to No. 2.

4 In this case there was placenta praevia. Internal version was performed and measures taken to cope with and remedy the effects of the bleeding. The patient recovered to a considerable extent but died suddenly an hour later, from heart failure.

5 Septic endometritis and gangrenous vaginitis, following an exceedingly difficult labour.

6 Subacute liver necrosis with severe vomiting. The immediate cause of death was the rupture of an acute ulcer of the oesophagus due to ante-mortem digestion.

One woman, who was confined before admission to hospital, developed pelvic suppuration, from which she died two months afterwards.

Another woman with advanced heart disease died during pregnancy, but the death was due entirely to the heart condition.

There were 66 cases of stillbirths (6·3 per cent.), a decrease of 11 from the previous year. The causes of death were as follows :—

Prematurity	..	..	..	..	11
Maceration..	..	..	..	..	4
Intra uterine death	..	..	..	..	1
Hydrocephalus and spina bifida	..	..	..	..	5
Toxaemia in mother	..	..	..	..	2
Cord tightly round neck	..	..	..	..	2
Prolapsed cord	..	..	..	..	2
Ante-partum haemorrhage	..	..	..	..	11
Protracted labour	..	..	..	..	7
Difficult labour	..	..	..	..	5
Complicated breech	..	..	..	..	8
Intracranial haemorrhage	..	..	..	..	5
Uncertain	..	..	..	..	3
					<hr/>
					66
					<hr/>

Thirty-five children died within 10 days of birth, a decrease of 3 from the previous year. The causes of death were :—

Prematurity	..	..	..	..	25
Debility from birth	..	..	..	..	6
Maternal toxaemia	..	..	..	..	1
Congenital heart lesion	..	..	..	..	1
					<hr/>
					35
					<hr/>

There was one case of ophthalmia neonatorum, which was cured. Artificial feeding had to be undertaken in 23 cases and, altogether, 70 children were not entirely breast-fed.

At the ante-natal clinic 1,002 women were registered and 6,047 attendances recorded, the respective figures for last year being 983 and 5,313.

**Mental Wards.—**

The following table shows statistics of admissions to and discharges from the Mental Wards for the year 1936.

	Men.	Women.	Total.
Remaining in hospital on 31st December 1935,	95	120	215
Admitted from outside .. .. .	193	268	461
Admitted from Wakefield Mental Hospital, under Sec. 25 .. .. .	15	..	15
Transferred from hospital general wards ..	46	56	102
Total admissions and transfers .. ..	254	324	578
Total treated during 1936 .. .. .	349	444	793
Discharged to Mental Hospital as certified cases .. .. .	58	92	150
Discharged to Mental Hospital as temporary patients .. .. .	10	13	23
Discharged to Mental Hospital as voluntary patients .. .. .	17	16	33
Discharged to Mental Deficiency Authorities .. .. .	6	..	6
Transferred to hospital general wards ..	56	108	164
Discharged .. .. .	72	80	152
Died .. .. .	28	20	48
Total .. .. .	247	329	576
Remaining in hospital on 31st December, 1936	102	115	217

The number of patients admitted to the Mental Wards has been steady during the past ten years. Cases sent under certificate to Mental Hospitals numbered one more than during the previous year, while temporary cases fell by 3 and voluntary by 6. Many of the cases admitted to the Mental Wards are of the senile type, their symptoms often being of the terminal variety that precede death. Such cases are seldom sent to Mental Hospitals, it being possible in a large number to transfer them to wards in the hospital set aside for chronic cases. The number of cases certified for detention in the Mental Wards on long orders was 23, viz., 8 men and 15 women.

**Pathological Department.**—Despite adverse circumstances, further development of the pathological service occurred in 1936, and the total of specimens examined reached the new record figure of 8,039, an increase of 870 on the output for 1935, and of 1,081

on that for 1933. Analysis of the work shows that the increase was chiefly in tests which require special skill, whereas an actual decrease occurred in tests of a simple or routine character. Amongst the former were estimations of the urea and sugar content of blood, gastric analysis and blood (count) examinations. The last mentioned numbered 491, a total never previously reached. These results are the inevitable and direct outcome of the increase in the number of patients with "acute" illness, and the augmented medical staff.

It will be realised that the routine examinations of specimens, while providing a satisfactory index of the work done, are only part of the service. Thus, the number of autopsies was 363, only 17 below the record figure of 380 in 1935. The microscopical specimens, essential to a proper study of these, numbered over 2,000, and about 50 naked-eye specimens were added to the pathological museum. Unfortunately the preparation of an adequate catalogue of the collection is still suspended owing to the pressure of other and more urgent duties.

The output of research was, of necessity, negligible, but two papers by Dr. Polson on ante-mortem digestion of the oesophagus and on experimental liver necrosis were published in the *Journal of Pathology and Bacteriology*.

The increase in work necessitated a request for further technical assistance and accommodation. A laboratory annexe, in the Hospital Lodge, was equipped and made ready for use on December 10th and two new posts for junior technicians were created. The selected candidates began their duties on December 14th.

The pathological service has developed in such a manner and to such an extent as to be beyond the scope of one medical specialist, and the appointment of an assistant pathologist cannot be long delayed.

**X-Ray Department.**—The number of patients X-rayed was 3,363, of which 387 were also screened by the radiologist. The corresponding figures for 1935 were 2,595 and 360. The quality of the work has been maintained, but it has become clear that to reach the standard of diagnosis aimed at, and to cope with the ever-increasing demand for examination of patients, the installation of additional equipment before the new building can be completed is essential.

**Massage Department.**—The number of patients dealt with was 836, practically the same as in 1935, but a great many more treatments were given, the total number of these having risen by 2,797. Details of these treatments were as follows:—

Massage and exercises	..	..	15,654
Radiant heat	..	..	2,137
Electrical	..	..	1,997
Diathermy	..	..	262
Wax baths	..	..	32
Ultra-violet radiation	..	..	4,507
			<hr/>
			24,589
			<hr/>

An additional masseuse was appointed during the year, half of her time being spent in the hospital and half at Killingbeck Sanatorium.

The Massage Department is kept fully occupied with work, but is inadequately housed and equipped, and must continue to be so until a more commodious home is found for it in the contemplated extensions.

**Almoners' Department.**—During the year there has been a steady increase in the amount of social after-care work, and this has necessitated the appointment of a second assistant almoner. The appointment was made in June, 1936, and a third clerk was appointed at the same time.

Weekly visits are now made to St. George's Infirmary, and are much appreciated by the patients.

During the year 130 people were sent away for convalescence, responsibility for the cost being accepted as follows:—

- 77 by the Leeds Convalescent Society.
- 37 by the Workpeople's Hospital Fund.
- 2 by the Leeds Education Committee.
- 4 by the Tuberculosis Care Committee.
- 10 by the Almoners' Samaritan Fund.

Following a request from the Leeds Convalescent Society for a grant towards their work, the Leeds Health Committee agreed to make an annual grant of £160; this figure may be revised if the number of patients increases to any extent.

The almoners have arranged for the supply of 188 appliances during the year, at a total cost of £304 16s. 1d. Of this, £150 2s. 7d. has been recovered, £74 14s. 4d. from patients or their relations, and £75 8s. 3d. from other sources. Of the £154 13s. 6d. for which the Health Committee was responsible, £44 6s. 9d. was spent on patients who are on Out Relief.

Regular weekly visits to patients in their homes are now undertaken, but there is scope for much more visiting than is possible, owing to the pressure of work in the hospital.

The Samaritan Fund has been a very valuable help, and the money has been spent as follows:—

	£	s.	d.
Convalescence .. ..	20	16	6
Fares .. ..	6	10	2
Lodgings .. ..	2	17	0
Clothes .. ..	5	1	3½
Extra nourishment .. ..	1	16	3
Interim help .. ..	2	15	0
Comforts .. ..		2	6
Pawn recoveries .. ..		15	0
Postal Orders, etc. .. ..		4	3
Balance .. ..	8	3	6
	<hr/>		
	£49	1	5½
	<hr/>		

**Review.**—The work of the Hospital, as is indicated earlier, shows a continuance of the all round increase that has been characteristic for several years. All departments report a greater amount of work done and everything points to an extension of activity for some time to come. It is devoutly to be hoped that the developments outlined in last year's report will come to fruition very soon. The handicaps under which much of the work has to be carried out are great, and it is only by the good will and good humour on the part of the various sections of the staff concerned that so



much has been accomplished. That the plans put forward have not yet begun to be translated into buildings is a source of disappointment to everybody.

The accommodation was fully taxed in all departments at various times during the year, and waiting lists had to be established. The type of case chiefly affected was the elderly and chronic patient, more urgent cases being given the preference. It is true that the full complement of beds was not always available, but even if it had been it is doubtful if it could have been properly utilised because of staff difficulties. The altered nature of the work now carried out in the hospital, with its much heavier demands on the nursing personnel, has inevitably caused a diminution in the number of patients that can be adequately attended per nurse. The lack of room in the Nurses' Home means that the extra staff required cannot be accommodated, apart altogether from the present widespread difficulty of obtaining a steady supply of suitable probationer nurses.

The call on the services of the Maternity Department showed no diminution. That the increase of labours was limited to 50 was to some extent due to efforts made to persuade those who had the facilities and accommodation to have their confinements at home. The custom of entering hospital for such events has now become firmly established, and it will be interesting to watch the effect of the new municipal domiciliary midwifery service on the number of cases dealt with in hospital.

The reconditioning of Blocks A and B begun in August had not been completed by the end of the year. Other blocks are awaiting similar treatment, especially "Section 6," the oldest part of the hospital. The use of the wards for ordinary hospital purposes instead of for the accommodation of chronic cases has made this reconditioning an urgent necessity.

As the building schemes decided upon by the Committee have reached a stage approaching materialisation, attention may be directed now to the consideration of further developments. One such has been noted in previous reports, namely that of improved accommodation for maternity cases. For some time past, this department has dealt with numbers which have reached, and to a small degree passed, the maximum considered desirable, but which have not reached those possible if all seeking admission were



accepted. If any decision is taken to bring the lying-in period in hospital into line with the fourteen days laid down in the Midwives Act, 1936, the present provision of beds must of necessity be amplified. In any case, the position should be reviewed in the light of modern ideas of what constitutes satisfactory accommodation for maternity patients. These last remarks apply in equal measure to St. Mary's Infirmary.

Two further items deserve attention. The first is the provision of a casualty department, the merits of which need not be gone into here. The second is the consideration of quarters for the resident medical staff. Those now in use were not designed for a staff of the present size, and thought must also be had for the future.

During the year addition was made to the medical staff of a dermatologist, three assistant physicians and an assistant orthopaedic surgeon, as well as to the resident staff of two senior officers, one on the medical side and the other on the surgical. This increase has been of the utmost value, and has resulted in a very great deal of extra work being undertaken. It is of interest to note that increase of medical staff has never at any time during the past ten years meant any decrease in the amount done by any individual but has resulted in improved service to the patients.

One feature that calls for comment is the continuing development of co-operation with the voluntary hospitals. The relations existing with the General Infirmary and the Public Dispensary and Hospital have been friendly and helpful. A very large number of cases find their way to us by reference from one or the other of those institutions. No formal scheme is in existence, for a variety of reasons which need not be discussed now, but amicable working is well established, with advantage to everybody. The formation of the Joint Hospitals Advisory Committee, composed of representatives from the Health Committee and the Voluntary Hospitals, is a departure of the utmost importance and significance. Here can be discussed problems affecting wider interests than those of any one hospital or of all, and viewpoints obtained that otherwise might be unavailable. Its function in relation to the development in a co-ordinated manner of hospital services in the city should be of the utmost value.

### ST. MARY'S INFIRMARY.

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The following table gives statistics of admissions to and discharges from St. Mary's Infirmary during 1936:—

	Men	Women	Children	Total
Remaining in hospital on 31st December, 1935 .. ..	63	147	18	228
Admitted during the year ..	351	896	10	1,257
Births .. .. .	..	..	426	426
Total admissions and births ..	351	896	436	1,683
Total treated during 1936 ..	414	1,043	454	1,911
Discharged during 1936 ..	192	731	428	1,351
Died during 1936 .. ..	154	162	8	324
Total discharges and deaths ..	346	893	436	1,675
Remaining in hospital on 31st December, 1936 .. ..	68	150	18	236

The highest number of beds occupied was 228 on 11th June and the lowest number 203 on 9th November. The average duration of stay was 48 days. The total admissions, viz., 1,683, shows a decrease from the previous year of 206.

The number of women confined in hospital was 435, an increase of 14. There were 13 stillbirths, 4 cases of twins, and the number of live births was 426. One case of puerperal fever was notified and 9 of puerperal pyrexia. One maternal death took place in the hospital. This was a case of albuminuria complicated by heart disease. The patient died undelivered, from eclampsia and heart failure. The number of cases delivered by forceps was 12. There

were 4 cases of partially adherent placenta, and 18 of post-partum haemorrhage, mostly of a mild type. The causes of stillbirth were :—

Prematurity	..	..	..	..	5
Difficult breech	..	..	..	..	2
Toxaemia in mother	..	..	..	..	2
Syphilis in mother	..	..	..	..	1
Anencephaly	..	..	..	..	1
Uncertain	..	..	..	..	2
					—
					13
					==

The number of children who died within 10 days of birth was 7 :—

Melaena neonatorum	..	..	..	..	2
Intracranial haemorrhage	..	..	..	..	1
Spina bifida	..	..	..	..	1
Prematurity	..	..	..	..	2
Debility from birth	..	..	..	..	1
					—
					7
					==

The ante-natal clinic was attended by 291 women, an increase of 10 over the previous year, and the total number of attendances recorded was 1,359, an increase of 82.

## ST. MARY'S INFIRMARY.

## DISEASES FROM WHICH PATIENTS SUFFERED.

DISEASE.	Men.	Women.	Children.	Total.	DISEASE.	Men.	Women.	Children.	Total.
INFLUENZA .. .. .	1	..	..	1	ACCIDENTAL INJURY AND VIOLENCE :—				
TUBERCULOSIS :—					Fractures :—				
Pulmonary .. .. .	113	50	1	164	Clavicle .. .. .	..	1	..	1
Non-Pulmonary :—					Radius and Ulna .. .. .	..	1	..	1
Hip .. .. .	1	..	..	1	Colles' .. .. .	..	1	..	1
Meninges .. .. .	2	..	..	2	Femur .. .. .	..	1	..	1
	3	..	..	3	Tibia and Fibula .. .. .	..	1	..	1
					Pott's .. .. .	..	1	..	1
MALIGNANT DISEASE :—					Skull .. .. .	2	..	..	2
Cancer of Larynx .. .. .	1	..	..	1	Concussion .. .. .	..	1	..	1
" Lung .. .. .	1	..	..	1	Contusions .. .. .	..	1	..	1
" Stomach .. .. .	..	3	..	3	Sprains .. .. .	..	1	..	1
" Colon .. .. .	1	2	..	3	Burns .. .. .	..	1	..	1
" Rectum .. .. .	2	1	..	3	Alcoholism .. .. .	..	1	..	1
" Breast .. .. .	..	8	..	8		5	9	..	14
" Uterus .. .. .	..	6	..	6	NERVOUS SYSTEM :—				
" Vulva .. .. .	..	1	..	1	Cerebral Hemorrhage .. .. .	1	4	1	6
Cerebellar Tumour .. .. .	1	..	..	1	" Thrombosis .. .. .	48	58	..	106
Sarcoma of Bone .. .. .	2	1	..	3	" Diplegia .. .. .	2	..	..	2
	8	22	..	30	Paralysis Agitans .. .. .	..	2	..	2
RHEUMATISM :—					Post-encephalitic Parkinson- ism .. .. .	3	3	..	6
1. Acute Rheumatism .. .. .	3	3	1	7	Epilepsy .. .. .	1	3	..	4
Chorea .. .. .	..	..	1	1	Locomotor Ataxia .. .. .	3	1	..	4
2. Fibrositis .. .. .	1	..	..	1	Spastic Paraplegia .. .. .	1	..	..	1
Myalgia .. .. .	1	1	..	2	Disseminated Sclerosis .. .. .	..	1	..	1
Sciatica .. .. .	..	1	..	1	Sub-acute Combined Degeneration of Cord .. .. .	..	1	..	1
Chronic Rheumatism .. .. .	2	..	..	2	Neuritis .. .. .	..	1	..	1
3. Osteoarthritis .. .. .	2	2	..	4	Neurasthenia .. .. .	3	..	..	3
Rheumatoid Arthritis .. .. .	2	8	..	10	Vertigo .. .. .	1	..	..	2
	11	15	2	28	Myopia .. .. .	..	2	..	2
DISEASES CONNECTED WITH PREGNANCY AND CHILD- BIRTH :—					Spina Bifida .. .. .	..	4	1	5
Puerperal Pyrexia .. .. .	..	9	..	9	Neurosis .. .. .	..	4	..	4
" Fever .. .. .	..	1	..	1	Mental Deficiency .. .. .	1	..	..	1
Threatened Abortion .. .. .	..	1	..	1		64	81	2	147
Eclampsia .. .. .	..	1	..	1	RESPIRATORY SYSTEM :—				
Albuminuria .. .. .	..	20	..	20	Bronchitis .. .. .	47	44	..	91
Pyelitis .. .. .	..	8	..	8	Broncho-pneumonia .. .. .	2	4	..	6
Valvular Heart Disease .. .. .	..	2	..	2	Lobar Pneumonia .. .. .	1	2	..	3
Varicose Veins .. .. .	..	1	..	1	Fibrosis of Lung .. .. .	..	1	..	1
	..	43	..	43	Bronchiectasis .. .. .	1	..	..	1
					Pleurisy .. .. .	..	1	..	1
					Asthma .. .. .	1	1	..	2
						52	53	..	105
					CIRCULATORY SYSTEM :—				
					Valvular Heart Disease .. .. .	4	13	..	17
					Cardiac Myopathy .. .. .	30	59	..	89
					Arterio-Sclerosis .. .. .	31	53	..	84
					Hypertensia .. .. .	3	2	..	5
					Aneurysm .. .. .	..	1	..	1
					Thrombo-phlebitis .. .. .	..	1	..	1
					Anæmia .. .. .	..	4	..	4
					Pernicious Anæmia .. .. .	1	2	..	3
					Melaena Neonatorum .. .. .	..	..	2	2
					Hodgkin's Disease .. .. .	1	..	..	1
						70	135	2	207





## ST. GEORGE'S INFIRMARY.

The number of admissions during the year was 299, the discharges amounting to 119 and the deaths to 48. The average number of beds occupied was 183, the highest being 283 and the lowest 138.

The following table shows the classification of diseases and deaths :—

	Children		Adults	
	Dis- charged.	Died.	Dis- charged.	Died.
Infectious diseases .. ..	14	..	..	..
Non-pulmonary tuberculosis ..	4	..	1	..
Malignant disease .. ..	..	..	1	1
Acute rheumatic conditions ..	23	..	..	..
Chronic arthritis .. ..	..	..	3	..
Venereal disease .. ..	1	..	..	..
Mental diseases .. ..	..	..	4	..
Diseases of nervous system ..	..	1	5	3
Diseases of respiratory system	16	..	6	1
Diseases of circulatory system	10	..	18	40
Diseases of digestive system ..	7	..	1	2
Diseases of genito-urinary system .. ..	..	..	3	..
Diseases of skin .. ..	..	..	1	..
Other diseases .. ..	..	..	1	..
<b>TOTAL .. ..</b>	<b>75</b>	<b>1</b>	<b>44</b>	<b>47</b>

The alterations alluded to in my previous report were completed and the extra accommodation thus provided, viz., 143 beds, was fully occupied before the end of the year. The results of the structural changes are considered to be very satisfactory and to have provided wards of a very pleasant nature. The commissioning of the extra beds enabled certain necessary alterations to be carried out at St. James's Hospital, and incidentally has increased the accommodation for acute cases at that hospital.





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# Tuberculosis.

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## TUBERCULOSIS.

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The total number of names on the register on December 31st, 1936, was 2,994, as compared with 3,025 at the corresponding period of last year, a decrease of 31.

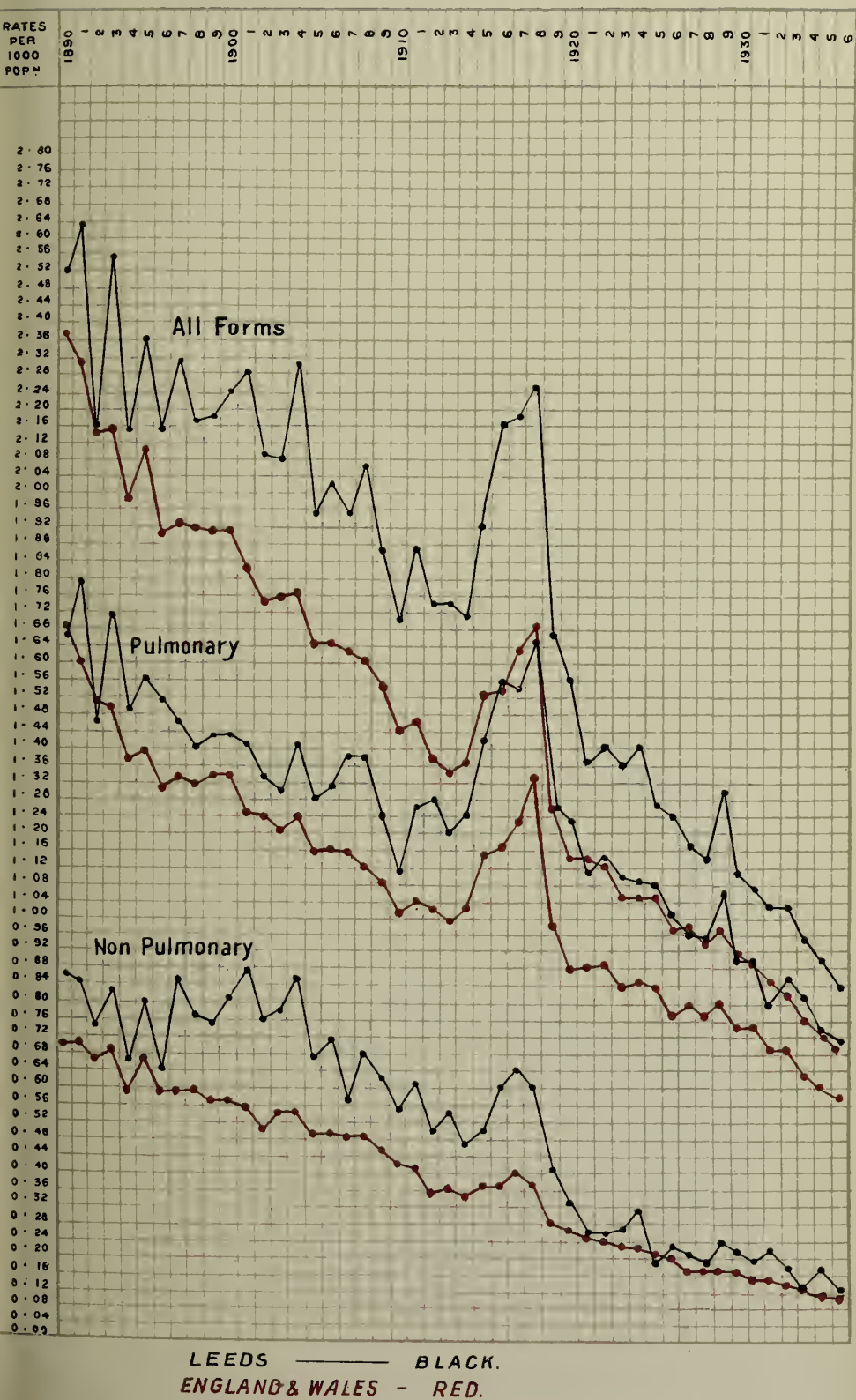
There were added to the register during the year on account of fresh notifications and inward transfers 694 names, and removed from the register on account of cancellations owing to death, removal from the city, and cure or change in diagnosis, 725 names.

This is the ninth year in succession that a new low record has been established. For the first time since the inception of the scheme the number of cases on the register has fallen below 3,000. In a period of 25 years that is no mean achievement and reflects great credit both on the health organisation of the city and on the staff specially charged with the administrative and clinical control of the scheme. A certain amount of the credit for this happy result is also due to other factors, notably, the improvement in housing, in nutrition, and the general standard of living. To-day the people are better educated and understand more about the prevention of disease than they did a quarter of a century ago and that in itself must have had an important bearing on the results.

The following table shows the number of cases on the register at the end of each year since 1925.

Year.			Number of Cases.	Increase or decrease compared with the previous year.
1925	..	..	7,599	—
1926	..	..	8,288	+ 689
1927	..	..	8,337	+ 49
1928	..	..	7,867	- 470
1929	..	..	6,076	- 1,791
1930	..	..	5,248	- 828
1931	..	..	4,109	- 1,139
1932	..	..	3,495	- 614
1933	..	..	3,294	- 201
1934	..	..	3,112	- 182
1935	..	..	3,025	- 87
1936	..	..	2,994	- 31

# TUBERCULOSIS DEATH RATE. - 1890 - 1936.





Notifications of tuberculosis received during the year.

PULMONARY.

Ages.	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total.
Males ..	..	3	26	52	62	43	68	39	16	309
Females ..	..	8	29	77	46	31	20	6	5	222
Totals ..	..	11	55	129	108	74	88	45	21	531

NON-PULMONARY.

Ages.	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total.
Males ..	3	17	32	12	7	5	6	2	1	85
Females	1	11	31	12	14	3	2	4	..	78
Totals ..	4	28	63	24	21	8	8	6	1	163

TUBERCULOSIS.

YEAR.	DEATHS.						NOTIFICATIONS.					
	Pulmonary tuberculosis.		Non-pulmonary tuberculosis.		All forms tuberculosis.		Pulmonary tuberculosis.		Non-pulmonary tuberculosis.		All forms tuberculosis.	
	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Cases.	Case-rate.	Cases.	Case-rate.	Cases.	Case-rate.
1926	477	1.01	108	0.23	585	1.24	1,299	2.74	161	0.34	1,460	3.08
1927	457	0.96	101	0.21	558	1.17	811	1.70	155	0.32	966	2.02
1928	453	0.95	89	0.19	542	1.14	766	1.61	158	0.33	924	1.95
1929	508	1.06	113	0.24	621	1.30	743	1.55	156	0.33	899	1.88
1930	432	0.90	101	0.21	533	1.11	642	1.34	251	0.52	893	1.87
1931	439	0.90	88	0.18	527	1.08	666	1.37	176	0.36	842	1.73
1932	386	0.80	107	0.22	493	1.02	574	1.18	162	0.33	736	1.52
1933	412	0.85	87	0.18	499	1.03	632	1.30	151	0.31	783	1.61
1934	392	0.81	70	0.14	462	0.95	617	1.27	172	0.35	789	1.62
1935	358	0.73	77	0.16	435	0.89	569	1.17	141	0.29	710	1.46
1936	346	0.71	62	0.13	408	0.83	531	1.08	163	0.33	694	1.42

## PULMONARY TUBERCULOSIS.

## AGES AT DEATH.

1936.	-5	5-10	10-15	15-20	20-25	25-45	45-65	65+	Total.
Males ..	3	..	..	4	15	82	103	18	225
Females	1	..	2	13	21	49	27	8	121
TOTALS	4	..	2	17	36	131	130	26	346
Average 10 years 1926-1935	7	3	5	38	56	171	134	17	431

## NON-PULMONARY TUBERCULOSIS. DEATHS.

1936.	Tubercular meningitis.	Abdomin- al.	Bones and Joints.	Other tuber- culosis.	Total.
Males ..	14	6	4	10	34
Females ..	9	7	3	9	28
Totals ..	23	13	7	19	62

## AGES AT DEATH.

1936	-5	5-10	10-15	15-20	20-25	25-45	45-65	65+	Total.
Males ..	10	3	..	5	2	6	8	..	34
Females	6	3	2	5	1	7	4	..	28
Totals ..	16	6	2	10	3	13	12	..	62
Average 10 years 1926-1935	36	11	6	9	6	13	10	3	94



**Statistics.**—*Notifications.*—During the year 531 cases of pulmonary and 163 of non-pulmonary tuberculosis were notified, making a total of 694 cases of which 394 were males and 300 females. Compared with the previous year this is a decrease of 38 in the number of pulmonary and an increase of 22 in the non-pulmonary notifications, and compared with the average of the previous five years, a decrease of 81 pulmonary and an increase of 3 non-pulmonary.

Of the total cases of pulmonary tuberculosis notified 12.4 per cent. were children under 15 years and 87.6 per cent. persons over 15 years. The corresponding figures for the previous year were 10.4 per cent. and 89.6 per cent. respectively. The age group responsible for the largest number of notifications (129) was 15-25.

As regards the non-pulmonary type of disease, 58.3 per cent. were children under 15 years and 41.7 per cent. persons over 15. The corresponding figures for the previous year were 53.2 per cent. and 46.8 per cent. respectively. The age group showing the largest number of notifications (63) was 5-15.

Of the total cases notified 484 were by medical practitioners and 210 came from institutions.

The number of cases of pulmonary tuberculosis not heard of until the time of death was 37 and the number of non-pulmonary 23, and there was one posthumous notification of non-pulmonary tuberculosis, making a total of 61. This is a decrease of one on the figure for the previous year.

The table on page 115 gives the deaths from all forms of the disease with the year of notification. Out of a total of 408 deaths from tuberculosis of all forms, 149, or 36.5 per cent., were notified in the same year as death occurred, 32, or 7.8 per cent., in the same month, and 44, or 10.8 per cent., in the same week. In the previous year there were 153, or 35.2 per cent. notified in the same year as death occurred, 36, or 8.3 per cent., in the same month, and 37, or 8.5 per cent., in the same week.

Earlier notification would be a great advantage, indeed might make all the difference between a high and a low death-rate, especially in the pulmonary form of the disease, and in the non-pulmonary form would almost certainly reduce the period of treatment and the degree of permanent crippling.

An analysis of the notifications in age groups will be found in the table on page 109.

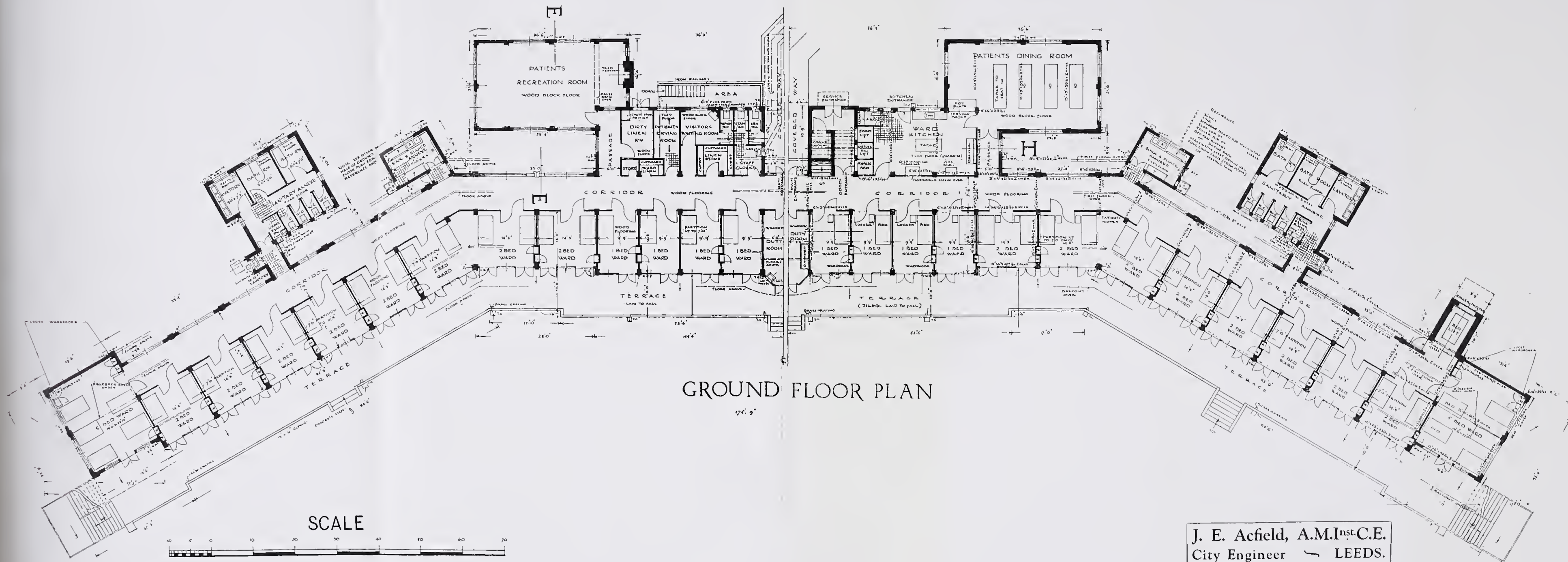
*Deaths.*—The total deaths from tuberculosis of all types during the year numbered 408, of which 259 were males and 149 females. In the previous year the total was 435, of which 261 were males and 174 females. Of the total pulmonary tuberculosis accounted for 346, or 84·8 per cent., and non-pulmonary 62, or 15·2 per cent. The death-rate from pulmonary tuberculosis was 0·71, from non-pulmonary 0·13, and from all forms of the disease 0·83, as compared with 0·73, 0·16, and 0·89 respectively for the previous year. Set against the average rates of the previous five years, these figures represent a decrease of 0·11 in the pulmonary rate, and 0·05 in the non-pulmonary, making a total decrease for all forms of the disease of 0·16. The death-rates from both forms of the disease are the lowest on record.

*Comparative rates, England and Wales, and other Towns.*—The provisional death-rates for England and Wales for the year were from pulmonary tuberculosis 0·58, from non-pulmonary tuberculosis 0·11, making a total death-rate of 0·69. Comparing these rates with Leeds it will be observed that the Leeds rates were higher by 22·4 per cent. in the case of pulmonary tuberculosis, by 18·2 per cent. in non-pulmonary, and 20·3 per cent. in all forms of the disease.

With reference to the death-rate from pulmonary tuberculosis it will be noted on referring to the table on page 17 that among the large towns of England and Wales, Leeds equal with Birmingham and Bristol occupied fifth place, the towns with lower rates being in order Bradford, Sheffield, London and West Ham, and with higher, Stoke-on-Trent, Hull, Liverpool, Nottingham, Manchester and Newcastle.

*Death-rates in Wards.*—The wards with the highest death-rates from pulmonary tuberculosis were Central (1·40), Woodhouse (1·37), Richmond Hill (1·10), Westfield (1·02), and Osmondthorpe (1·01), whilst those with the lowest were Roundhay (0·15), Hyde Park (0·19), Holbeck (North) (0·24), Cross Gates and Templenewsam (0·30), and Far Headingley (0·36).

The tables on pages 113 and 110 give the analysis of the deaths in the various wards and age groups.



J. E. Acfield, A.M.Inst.C.E.  
City Engineer — LEEDS.





## TUBERCULOSIS—DEATHS AND RATES IN WARDS.

MUNICIPAL WARD.	Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		All Forms Tuberculosis.	
	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.
Mill Hill and South..	14	0·93	..	..	14	0·93
Westfield .. ..	18	1·02	5	0·28	23	1·30
Blenheim .. ..	20	0·93	2	0·09	22	1·02
Central .. ..	26	1·40	1	0·05	27	1·45
Woodhouse .. ..	25	1·37	2	0·11	27	1·48
North .. ..	14	0·76	..	..	14	0·76
Far Headingley ..	7	0·36	2	0·10	9	0·46
Hyde Park .. ..	3	0·19	1	0·06	4	0·25
Kirkstall .. ..	12	0·55	3	0·14	15	0·68
Burmantofts ..	16	0·77	4	0·19	20	0·96
Harehills .. ..	16	0·69	2	0·09	18	0·77
Potternewton ..	9	0·47	1	0·05	10	0·52
Roundhay .. ..	3	0·15	5	0·25	8	0·40
Cross Gates and Templenewsam ..	5	0·30	1	0·06	6	0·37
Richmond Hill ..	22	1·10	3	0·15	25	1·25
Osmondthorpe ..	22	1·01	8	0·37	30	1·37
East Hunslet ..	17	0·96	1	0·06	18	1·02
Hunslet Carr and Middleton .. ..	19	0·88	2	0·09	21	0·97
West Hunslet ..	13	0·76	3	0·18	16	0·94
Beeston .. ..	8	0·47	2	0·12	10	0·59
Holbeck (South) ..	10	0·73	3	0·22	13	0·94
Holbeck (North) ..	4	0·24	2	0·12	6	0·36
Armley and New Wortley .. ..	12	0·61	3	0·15	15	0·76
Upper Armley ..	8	0·47	3	0·18	11	0·65
Bramley .. ..	13	0·64	3	0·15	16	0·79
Farnley and Wortley .. ..	10	0·49	..	..	10	0·49
City .. ..	346	0·71	62	0·13	408	0·83

The housing conditions of 662 of the 694 cases of tuberculosis (all forms) notified, are shown in the table subtended :—

Rooms in house.	Through house.	Percentage of total throughs.	Back-to-back house.	Percentage of total back-to-back.	Percentage of total cases.
1 room .. ..	1	0·3	..	..	0·2
2 rooms .. ..	4	1·2	50	14·8	8·2
3 rooms .. ..	15	4·6	147	43·5	24·5
4 rooms .. ..	98	30·2	96	28·4	29·3
5 rooms .. ..	107	33·0	25	7·4	19·9
6 rooms .. ..	59	18·2	19	5·6	11·8
7 or more rooms	40	12·3	1	0·3	6·2
Total .. ..	324	100·0	338	100·0	100·0

In addition to the 324 through houses and 338 back-to-back houses, there were 32 cases notified from common lodging houses, etc., making a total of 694 cases of all forms of tuberculosis notified during the year.

The sub-joined table indicates the type of house occupied by 149 persons who were notified during 1936 as suffering from tuberculosis of all forms and who died during the year:—

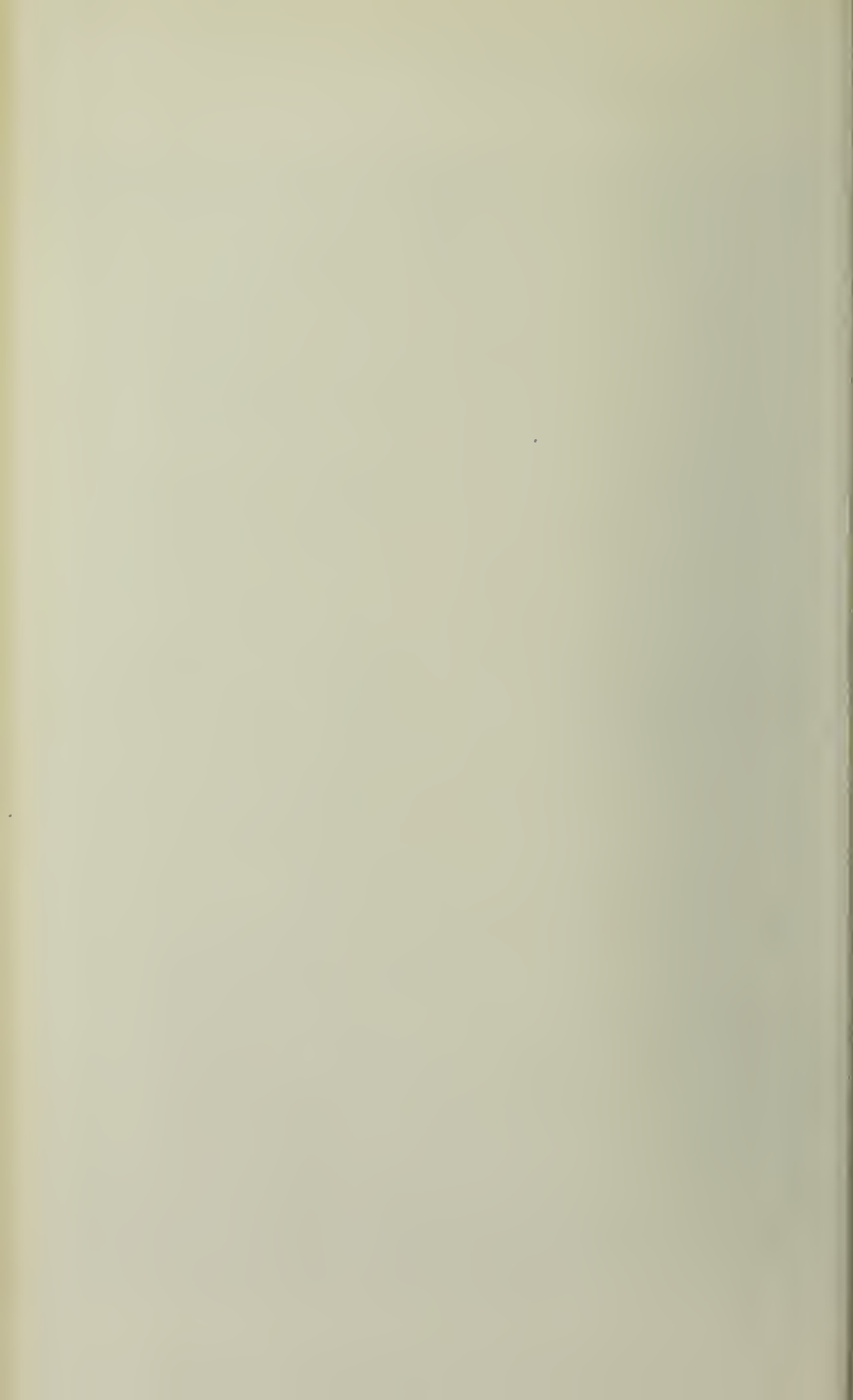
Rooms in house.	Through house.	Percentage of total throughs.	Back-to-back house.	Percentage of total back-to-back.	Percentage of total deaths.
1 room .. ..	..	..	..	..	..
2 rooms .. ..	..	..	13	15·3	9·5
3 rooms .. ..	2	3·8	37	43·6	28·5
4 rooms .. ..	18	34·6	22	25·9	29·2
5 rooms .. ..	17	32·7	6	7·1	16·8
6 rooms .. ..	10	19·2	7	8·2	12·4
7 or more rooms	5	9·6	..	..	3·6
Total .. ..	52	100·0	85	100·0	100·0

In addition to 52 through houses and 85 back-to-back houses, there were 12 deaths in which the home address was given as common lodging houses, etc.



NEW BLOCK FROM THE SOUTH-WEST.





DEATHS FROM ALL FORMS OF TUBERCULOSIS IN 1936 WITH YEAR  
OF NOTIFICATION.

Year of Notification.			No. dying in 1936.	Percentage of total deaths.
1914	..	..	1	0·2
1915	..	..	—	—
1916	..	..	1	0·2
1917	..	..	—	—
1918	..	..	2	0·5
1919	..	..	2	0·5
1920	..	..	2	0·5
1921	..	..	2	0·5
1922	..	..	3	0·7
1923	..	..	4	1·0
1924	..	..	2	0·5
1925	..	..	5	1·2
1926	..	..	2	0·5
1927	..	..	6	1·5
1928	..	..	2	0·5
1929	..	..	7	1·7
1930	..	..	4	1·0
1931	..	..	8	2·0
1932	..	..	17	4·2
1933	..	..	31	7·6
1934	..	..	35	8·6
1935	..	..	57	14·0
1936	..	..	149	36·5
Not notified	..		51	12·5
Died outside City			15	3·7
Total	..		408	100·0

**Institutional Accommodation for Tuberculosis.**—Cases of pulmonary tuberculosis requiring institutional treatment are sent to one or other of the two sanatoria provided by the city, Killingbeck or Gateforth. The former has 242 beds of which an average of 205 were occupied by pulmonary and of 30 by non-pulmonary cases during the year. The latter has 55 beds devoted to the treatment of adult pulmonary and non-pulmonary cases as they arise, of which an average of 51 were occupied during the year.

There are in addition 24 beds at St. Mary's Infirmary which are used for the reception of cases of chronic tuberculosis.

Early or suspected tuberculosis in children is treated in the children's sanatorium at "The Hollies" which possesses 40 beds of which an average of 38 were occupied during the year.

Cases of surgical tuberculosis are treated at the Marguerite Home, Thorp Arch, and the Lord Mayor Treloar's Hospital, Alton, Hampshire. The number of beds reserved in the former is 25 all of which were occupied, and in the latter a varying number which averaged 10 during the year 1936.

*Killingbeck Sanatorium Extension.*—The building of the new block of 100 beds for women commenced in September, 1934, was completed and opened on Thursday, July 9th, 1936.

In the unavoidable absence of the Minister of Health (Sir Kingsley Wood) the opening ceremony was performed by Geoffrey H. Shakespeare, Esq., M.P., M.A., LL.B., Parliamentary Secretary to the Ministry of Health.

In 1933 the City Council approved the recommendation of the Health Committee to build a new ward block of 100 beds for female patients and in May, 1934, accepted the tender of Messrs. Armitage and Hodgson to erect the building to plans prepared by Mr. J. E. Acfield, the City Engineer.

The new block which occupies an area of approximately 15,000 square feet stands on a plateau at the top of the main drive and is approached from the sanatorium proper through a glass covered way. Its aspect is South-South-West which ensures that all bedrooms get abundant sunshine.

The open area in front of the block on the South has been attractively laid out to a design by Mr. Thos. R. Trigg, the Director of Public Parks in the city. When this is fully developed, it will give an artistic and pleasing setting to the whole building.



ONE OF THE BEDROOMS



The building is linear, of two stories, straight in the centre with the wings brought forward at an obtuse angle. Balconies run the whole length of the building on each floor, the top floor being stepped back to prevent overhang and the darkening of the ground floor rooms. The upper balcony is approached from the lower by stone staircases at each end.

The main fabric is of steel and brick with precast concrete floors, the floor finishes being in hardwood or red tiles. The partitions consist of reinforced concrete finished with parian plaster, tiles or wood panels; the window frames are of steel specially designed to give free access of air and presenting in front a large area of glass between the roof and the first and ground floor balconies intersected only by the narrow upright supports of the building. The glass area extends to 9,600 square feet or approximately one-third of the floor area.

Each floor is a unit of 50 beds and is similar to the other in detail. The bedrooms are 48 in number, 16 having one bed, 24 two beds, 4 four beds, and 4 five beds, varying in size from 142 to 400 square feet. The single-bed rooms are situate in the centre of the building and are grouped round the staff duty rooms.

All the bedrooms open in front through French windows on to the balconies, while behind they have access through double doors on to a wide corridor which runs the whole length of the building from East to West and is 111 yards long. On the North of the corridor are the patients' dining and sitting rooms, service kitchen, storerooms and sanitary annexes. Central stairs and an electric bed-lift connect the two floors, while the latter communicates direct with a covered bay at the back where stretcher cases are received from the ambulance.

All the bedrooms are fitted with built-in wardrobes which will be found a great convenience for long term cases. Over each bed is fixed an electric light, also plugs for wireless headphones and a control for the light signal which replaces the old and obsolete electric bell. A patient desiring to call the attention of the nurse has merely to press the button and a red light shows in the corridor outside the bedroom and continues to show until the summons has been answered. The advantage of wireless facilities for the type of case which will be treated in this building is too obvious to require enlargement, suffice it so say that it will help to relieve the tedium of many a weary hour.

The furniture throughout is of tubular steel, upholstered in hygienic materials of a colour in keeping with that of the rooms.

A feature of the patients' dining room is the ease of service which is from a hot plate communicating direct with the kitchen. The kitchens themselves are fitted with the most modern appliances and labour-saving devices. Food will be cooked in the central kitchen of the sanatorium and conveyed to the ward kitchens in insulated containers. No actual cooking will be carried out in the ward kitchens.



The sitting rooms have been designed so as to ensure an abundance of light and air and at the same time to give that feeling of comfort and homeliness so essential in an institution where the period of residence has to be so long.

The colour scheme of the whole building has been selected to be as bright and attractive as possible ; on the exterior, blue, and the interior cream and red with sepia panelling in the bedrooms.

As in the case of the main sanatorium, steam is brought by pipe line from Seacroft Hospital. It enters the block at the control room in the basement. Here water for domestic use is heated in a calorifier and steam distributed to the apparatus in the service kitchens, etc.

All the rooms including the bedrooms are heated by radiators which are connected to a central heating system, also controlled from the basement. The main feature of this system, which is electrically controlled by thermostats acting upon a vacuum, is that it provides a wide range of temperature in the radiators which can be increased or decreased almost instantaneously.

Electricity for light and power and gas for use in the kitchens are obtained from the city services.

Exclusive of land, the cost of the building and furnishings was £27,500, equivalent to £275 per bed.

With the completion of the new ward block the accommodation in Killingbeck will be increased from 220 to 240 beds and the pressure on the female side thereby greatly relieved. In their new quarters the women patients will have greater comfort and the brighter surroundings will be an added incentive to them and the staff to persevere in their efforts to bring the fight against disease to a successful issue.

For the better understanding of the foregoing description a ground plan and two photographs are reproduced opposite pages 112, 114 and 116.

The next development at the Sanatorium must be the erection of a Nurses' Home. The existing Home is too small to accommodate all the nurses with the result that they have overflowed into the Maids' Home. The maids thus displaced have had to be accommodated in the old Killingbeck Hall. This is a building of some antiquity now rapidly falling into disrepair and no longer suitable for residential purposes. The condition of many of the rooms is extremely bad and that notwithstanding constant repair and attention over many years. Now that the wards at Old Killingbeck have been vacated there is no reason why this building should continue in use, besides which the site is required for the

erection of a Medical Superintendent's residence. Neither of the existing Homes is capable of extension and there is therefore no alternative but to provide fresh accommodation. Plans are at present in course of preparation for the building of an entirely new Home for Nurses on a site to the East of the main group of buildings with an exposure to the South. When completed the Home will accommodate 70 nurses with possibilities of extension should that be required.

For further details with respect to institutional treatment, see pages 131, 134 and 138.

**Public Health Act, 1925, Section 62.**—No action was necessary under this section during the year.

## REPORT OF THE WORK OF THE HEALTH CLINIC AND SANATORIA.

BY

NORMAN TATTERSALL, M.D. (Lond.), *Chief Clinical Tuberculosis  
Officer.*

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**General.**—The mortality from tuberculosis continues to fall and the year 1936 has proved no exception to the trend of recent years, another low record having been reached. The perusal of figures is apt to be dull reading and particular attention is therefore drawn to the graph facing page 108 which clearly indicates the decline in Leeds and in the country as a whole. A pleasing feature which is clearly brought out by this graph is that whereas the death-rate in Leeds (as in most other large cities) has always been higher than that of the country generally the gap is steadily becoming narrower and the black and red lines representing the two groups are coming closer together every year. It is hardly to be expected that large cities with their crowded population will achieve a lower mortality than the country as a whole but the approximation of the curves is an ocular proof that Leeds is gradually overcoming those factors which have made its past record significantly worse than the general average.

The decennium 1926-1936 has seen a fall of 33·1 per cent. in the tuberculosis mortality in Leeds, which is a larger fall than in any preceding period of ten years apart from the rapid fall following the abnormal figures of the war period.

It is impossible to assess the extent to which this result is the direct outcome of the activities of the tuberculosis department as so many other social and economic influences are at work. Slum clearance, less unemployment, better wages, improved working conditions, the study of nutrition, and improved facilities for recreation, must all tend to reduce the incidence and mortality of the disease, and these factors are all important in supplementing the direct attack on the disease made on more definitely medical lines.

The outstanding event of 1936 was the completion of the new block of 100 beds for women patients at Killingbeck Sanatorium which was opened in July, and which marks a definite milestone of progress as it is the first building designed expressly for the treatment of tuberculosis which has been built in connection with the Tuberculosis Service of this city. Patients who had experience of the previous dismal accommodation have been enthusiastic about the change to the delightful airiness of this modern building, and many visitors have come from other authorities to inspect the building and the many modern features incorporated in its design.

It had been hoped that as the new building provided some 20 extra beds for women it would go far to wipe out the waiting list which has been a source of difficulty in recent years. This, however, has not altogether been achieved, as the average duration of treatment has once more increased. This is pointed out by Dr. Gilmour in a later portion of this report and is made additionally clear by the subjoined table :—

Year.	Under 3 months.	3-6 months.	6-12 months.	Over 12 months.
1925	57·5%	39%	3%	0·5%
1935	23·4%	34·5%	26·6%	15·5%
1936	18%	30%	36%	16%

This table shows the marked reduction in the number of patients staying for a short period in hospital and the very marked increase of patients whose periods of treatment extends from 6 to 12 months. In 1925 only 3·5 per cent. of cases remained over 6 months, whilst during the year under review 36·0 per cent. stayed between 6 and 12 months and 16·0 per cent. for over a year.

The tendency to prolonged treatment is all to the good. It keeps the highly infectious patients away from contact with children for longer periods than formerly, and also in those patients who are making progress towards cure enables a degree of stabilisation to be reached which is not possible with short periods of treatment thus subsequent breakdown becomes less likely.

One other reason for the prolonged waiting list which has been referred to in previous years has been due to admitting cases of non-pulmonary tuberculosis who occupy beds for long periods. To combat this, arrangements were made towards the end of the year to send as many as possible of such patients to the Shropshire Orthopaedic Hospital, near Oswestry. This hospital will not take patients who have pulmonary disease in addition to their surgical condition so these patients must still be admitted to Killingbeck Sanatorium, but the withdrawal of the purely surgical cases has slightly eased the pressure on our existing accommodation.

In the last report reference was made to the increasing number of new corporation houses which were being provided for tuberculous families. During 1936 a much larger number of houses were completed and for the first time considerable numbers of the new "Sunshine" type of house, specially designed for the use of tuberculous patients, became available. These houses have a bedroom designed with a view to obtaining the maximum amount of sunshine and fresh air, and this bedroom must be occupied solely by the tuberculous patient. Although in some cases there is grumbling at the increased bus fares and other difficulties inseparable from re-housing patients from central districts in scattered estates on the fringe of the city, the majority of patients speak highly of their new surroundings. It will take years for the hardened slum dweller to learn to appreciate the advantages of re-housing but there can be no doubt that in the long run the benefits of the change will be reflected in an improved standard of health, of which the diminished incidence of tuberculosis will be only one amongst many advantages. During the year 115 tuberculous families were removed from slum dwellings or overcrowded conditions to new houses on Corporation estates, this is an increase of 45 over the previous year, and brings the total of such families re-housed to 356 in the last seven years.

**City of Leeds Health Clinic.**—Statistical details of the work of the Clinic appear on pages 124 and 125.

Early in 1936 the Health Committee decided to change the name of the Tuberculosis Dispensary to the one above as it was thought that some patients would be more ready to avail themselves

of the diagnostic facilities of this centre if the word Tuberculosis were kept in the background. It is difficult to say whether the change has had any definite effect although the figures of the work for the year show a further increase in the number of new patients and of contacts who passed through our hands. Of the 1,461 new cases referred for an opinion, a definite diagnosis was established in 531 cases (36.3 per cent.) of whom 419 showed pulmonary disease and 112 were suffering from non-pulmonary tuberculosis. There remained 109 cases under observation with the diagnosis not yet completed at the end of the year. The total number of cases remaining on the Health Clinic register at the end of the year was 2,722 of whom 918 were sputum positive.

*Contacts.*—The number of new contacts examined (678) was an increase of 49 over the previous year, whilst the percentage found to be suffering from tuberculosis was 6.2 as compared with 6.5 during 1935. An analysis of the contacts examined is made in the following table :—

“CONTACTS” FIRST EXAMINED AT THE HEALTH CLINIC  
FROM JANUARY 1st, 1936, to DECEMBER 31st, 1936.

	New Contacts Examined.	Found Sputum T.B +	Clinically definite, but sputum negative.	Diagnosed Non- Pulmonary Tubercle.	Found to be Non- Tubercular, lost sight of, etc.	Remaining under observa- tion.	Number admitted to Sanatoria for observation or treatment.
Males	91	5	1	—	81	4	6
Females	207	5	6	—	189	7	5
Boys ..	195	—	12	1	167	15	28
Girls ..	185	1	11	—	150	23	23
Total	678	11	30	1	587	49	62

73 cases remaining under observation on December 31st, 1935, were re-examined, with the following results :—

Definitely diagnosed as tubercular .. .. 20

Marked off as non-tubercular, died, lost sight  
of, etc. .. .. 53

Remaining under observation .. .. Nil.

Total examinations made = 1,019 (718 cases).



EXTRACTS FROM THE MINISTRY OF HEALTH ANNUAL RETURN. FORM T/145. (Table A.) FOR THE YEAR  
ENDED 31st DECEMBER, 1936. SHOWING, UNDER HEADINGS A. AND B., THE STATE OF DIAGNOSIS AT  
THE END OF THE YEAR.\*

A. New Cases examined during the year (excluding contacts).	PULMONARY.				NON-PULMONARY.				TOTAL.			
	Adults.		Children.		Adults.		Children.		Adults.		Children.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Definitely Tuberculous ..	245	152	8	14	24	25	30	33	269	177	38	47
Doubtfully Tuberculous ..	..	..	..	..	..	..	..	..	49	32	14	14
Non-Tuberculous ..	..	..	..	..	..	..	..	..	321	336	86	78
TOTALS ..	245	152	8	14	24	25	30	33	639	545	138	139
B. New Contacts examined during the year:—												
Definitely Tuberculous ..	6	11	12	12	..	..	1	..	6	11	13	12
Doubtfully Tuberculous ..	..	..	..	..	..	..	..	..	4	7	15	23
Non-Tuberculous ..	..	..	..	..	..	..	..	..	81	189	167	150
TOTALS ..	6	11	12	12	..	..	1	..	91	207	195	185
C. Cases written off Health Clinic Register:— Recovered ..	91	41	13	11	21	25	23	19	112	66	36	30
Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error)									449	570	278	265
TOTALS ..	..	..	..	..	..	..	..	..	561	636	314	295
Number of Persons on Health Clinic Register:—												
Diagnosis completed ..	..	..	..	..	..	..	..	..	..	..	..	2,561
Diagnosis not completed ..	..	..	..	..	..	..	..	..	..	..	..	161
TOTAL ..	..	..	..	..	..	..	..	..	..	..	..	2,722

\* Returns prior to 1931 have shown the diagnosis as at one month from date of first attendance.

PULMONARY TUBERCULOSIS.

	New patients.				Number bacteriologically positive.				Number clinically positive, but not T.B. +.				Number found to be Non-tubercular, lost sight of, etc.				Still under observation.				Number admitted to Sanatoria for treatment or observation.			
	M.	F.	B.	G.	M.	F.	B.	G.	M.	F.	B.	G.	M.	F.	B.	G.	M.	F.	B.	G.	M.	F.	B.	G.
Insured	490	300	..	..	106	40	..	..	73	37	..	..	262	213	..	..	49	10	..	..	142	67	..	..
Non-Insured	125	220	108	106	51	61	..	4	15	14	8	10	59	123	86	78	..	22	14	14	55	33	10	20

OTHER FORMS OF TUBERCULOSIS.

	New patients.			Bones and Joints.			Abdominal			Other Organs.			Glands.			Number admitted to Sanatoria.			
	M.	F.	B.	G.	M.	F.	B.	G.	M.	F.	B.	G.	M.	F.	B.	M.	F.	B.	G.
Insured	17	13	..	..	6	4	..	..	4	2	..	..	5	2	..	2	5	..	..
	7	12	30	33	1	7	13	11	2	..	1	4	3	4	1	1	1	15	17
Non-Insured																4	3	..	..
																..	4	12	10

Total attendances at Health Clinic for—

(a) Light treatment	..	3,593
(b) Other special treatments	..	2,856
(c) Ordinary clinics	..	7,266
(d) X-ray	..	1,562
		<u>15,277</u>

Total Number of Clinical Examinations

(included in attendances)	..	..	6,961
Number of cases making the clinical attendances (excluding Light and Special treatments)	..	..	3,286

*Deaths from Acute Tuberculosis in Young Children.*—For some years special investigations have been carried out as to the source of infection in cases of young children dying from meningitis, tuberculous broncho-pneumonia, and peritonitis. The majority of these cases are not known to us as suffering from tuberculosis until death, but it is a well-known fact that the great majority of them derive their infection from human sources and that investigation will bring to light cases of adult disease which were previously unknown. The number of such cases investigated during the year was 24 as compared with 32 in 1935. Of these, six were found to have been living in close contact with cases of definite disease already on the register. Examination of the contacts led to the detection in three cases of the father of the child as the previously unknown source of infection, thus bringing to light three cases of infectious disease which, but for the death of the child, would have continued unchecked to disseminate further infection. In one other case infection was traced with reasonable certainty to bovine infection of the milk supply.

In 7 further cases the contacts who would attend were examined and found healthy, but in four of these cases the father would not attend and in 2 cases the mother refused to be examined, whilst in a further 7 cases none of the contacts could be persuaded to attend.

*Co-operation with the Education Department.*—The system which was introduced last year of sending a weekly list of all known contacts of or below school age to the Education Department has been continued and has proved of value in calling the particular attention of School Medical Officers to the possibility of tuberculosis as a cause of symptoms of ill-health in contact children who come before them for routine examination.

*Home Visiting by Medical Staff.*—The medical staff paid 872 visits to patients in their homes. Of these 58 were for artificial pneumothorax inductions or refills, 69 for personal consultations with the patients' doctors, and 37 for other forms of special treatment.

*Treatment.*—There has been a further increase in the number of patients attending for artificial pneumothorax treatment, the refills carried out at the Health Clinic being 1,156, an increase of 104 on the previous year. It is essential to control pneumothorax

treatment by frequent X-Ray screening. The existing X-Ray plant is upstairs and is frequently in use for the taking of films at the time when pneumothorax refills are being done. The provision of a small screening plant on the ground floor is an urgent necessity and it is hoped that it may be possible to acquire such a plant during the coming year.

Treatment by injections of gold salts is still carried out in suitable cases and during the year 107 attendances were made for this treatment.

There has been an increase in the number of patients attending for fixation of bone and joint lesions by plaster of paris, etc., and these cases as well as patients attending for aspirations of glands and abscesses, tuberculin injections, and other minor surgical measures accounted for 1,121 attendances. Practically all the surgical work as well as the supervision of the Sunlight department is carried out by Dr. A. G. Evans.

*Artificial Sunlight.*—At the end of 1935 there were 28 cases still under treatment and 92 new cases came under the care of the department during the year. Total attendances amounted to 3,593, and 41 patients were still under treatment at the end of the year.

*Dental Treatment.*—In addition to visiting the various Sanatoria, Mr. W. L. Fleming, L.D.S., holds two sessions a week at the Health Clinic. Details of the treatment given are shown in the following table :—

	Health Clinic	Killing- beck.	Gateforth.	The Hollies.*
Cases .. .. .	123	157	23	42
Attendances .. .. .	424	477	48	42
Extractions :—				
Local anæsthetic .. .. .	393	496	58	3
N <sub>2</sub> O .. .. .	52	6	..	58
Fillings and Scalings .. .. .	26	36	24	4
Dentures :—				
Number.. .. .	66	27	4	..
Patients supplied .. .. .	39	16	3	..
Repairs, etc. .. .. .	10	5	1	..

\* 54 other children's teeth were examined.

*X-Ray Department.*—The present X-Ray plant was installed in 1927 and in the last ten years has paid for its initial cost many times over. The plant continues to give excellent service but is becoming obsolete in type owing to the great improvement in radiological apparatus in the past ten years. The modern plant can take a good X-Ray of a chest with an exposure of  $\frac{1}{100}$  sec. whilst our exposures average  $\frac{1}{10}$  sec.

It is universally acknowledged that a well taken X-Ray is the most important single factor in early diagnosis of pulmonary tuberculosis, and the time is coming when the present plant will have to be replaced by equipment which can produce better results. A great deal of the time of one medical officer, Dr. S. Thompson, is absorbed in the taking of X-Ray films. Much of this work could be done by a non-medical X-Ray technician, thus releasing the medical officer for other special duties which owing to the all round increase of work at the Health Clinic is becoming a pressing problem. Whilst the taking of films does not of necessity require a medical man their interpretation requires great skill and experience. If a technician were appointed the post could probably be combined with that of dispenser.

During the year 1,873 films were taken in addition to numerous screen examinations.

*Health Visitors.*—The nine health visitors who are on outside duties made 15,638 visits, of which 14,637 were to cases on the Health Clinic Register, 735 to complete environmental reports, and 266 to other notified cases.

Reference was made last year to the innumerable domestic and economic problems which are presented for solution to the health visitors. The removal of increasing numbers of families to outlying districts involves a whole series of new problems, and I have once more to acknowledge the large amount of careful thought which the health visitors give to the families under their care.

Valuable assistance is also rendered through the work of the District Nursing Association whose services are freely called upon for patients who need home nursing. During the year 85 such cases were under their care, entailing a total of 3,791 visits.

*Clerical.*—The majority of panel doctors willingly complete the National Health Insurance report form (G.P. 36) for patients on domiciliary treatment, and much useful information as to the progress and requirements of such patients was obtained from the 749 forms received. Only 15 remained outstanding.

Reports were sent to the Divisional Medical Officer of the Ministry of Health (Insurance Department) in 17 cases, and 91 reports and forms completed for the Ministry of Pensions on tuberculous ex-servicemen. The Medical Section of the Education Department were supplied with 1,325 reports on diagnosis, fitness for school, etc., on children of school age.

Initial reports to doctors (in cases referred by them) giving clinical, X-Ray and other findings, numbered 2,036 and a further 2,221 reports gave details as to the progress of patients as indicated by subsequent examinations.

Miscellaneous correspondence totalled 2,796 letters and 13,049 appointment and other post-cards.

**Care Work.**—The Leeds Association for the Care of Consumptives is the official title of the Voluntary association which carries out the care work in connection with the tuberculosis scheme. We are fortunate in having a very live Care Committee who raise funds by means of subscriptions, dances, garden parties, etc., for the invaluable work which they undertake. A summary is given below of the main channels of expenditure but this does not convey any true impression of the variety of needs and difficulties which are dealt with by the Association.

	Cases
Extra nourishment .. ..	857
Convalescence arranged .. ..	91
Beds, bedding and sick-room requisites supplied .. ..	105
Clothing grants .. ..	161
Financial and food grants .. ..	181
Other assistance and advice given ..	248
Assessments made for surgical appliances and dental treatment .. ..	125
	<hr/>
	1,768
	<hr/>

The Committee publishes an Annual Report on its work which may be obtained by anyone seeking further details on application to the Secretary at the Health Clinic. The following extract from their report gives some indication of the problems which are solved by their assistance, and once again I wish to acknowledge my gratitude to the workers who give so freely of their time to this most essential work.



"Modern methods of housing entail heavier expenditure for the patient. Removal from slum areas to outlying districts can both benefit and damage a patient's prospect. It is good to breathe smoke-free air; but to spend in transit and on extra shoe-leather money that should go to the building up and support of the body is of very doubtful benefit. The Public Assistance Committee does not claim to do more than provide a bare subsistence, which by no means repairs the ravages of this wasting disease. So one of the best works done by this Voluntary Committee is to provide the extra but very necessary food for these patients. The convalescence of non-infectious patients is a very important branch of preventive treatment. It also brings new hope into many tired and dull lives. In some cases where the patient has been thrifty, convalescence can be arranged through a friendly society at no cost to the Committee, but otherwise these voluntary funds are of tremendous value in enabling a patient to go to seaside and country homes from two to six weeks as advised by our Medical Officer.

The need of clothing and boots enters into every branch of the work, and during the past year the Voluntary Committee has spent nearly £140 in this way.

Care work is in truth the determining factor in the future of most patients' lives. Even sanatorium treatment in very many cases proves ineffective without it. Help in the home whilst the patient is undergoing sanatorium treatment can effectively compensate for the absence of the wage earner in very many cases. Extra comfort is also provided in the form of weekly grants of pocket money. These forms of help go far towards securing the prolonged residence necessary to ensure a reasonable hope of recovery."

**The Factory-in-the-Field.**—There has been no change in the activities carried out at this centre which employs tuberculous patients who are not yet fit to compete in the open labour market.

The roll of employees at the year end was as follows :—

Department.	Tuberculous.		Non-tuberculous.	
Firewood and firelighters	..	19	..	2
Brushmaking .. ..	..	4	..	2
Printing .. ..	..	6	..	1
Other employees .. ..	..	3	..	4
		—		—
		32		9
		==		==

It will be noted that there is a higher proportion of tuberculous to non-tuberculous employees than in the previous year when the figures were 30 and 11 respectively.

*Tuberculous Employees.*—Most of the workers have availed themselves of the substantial mid-day meal provided on the premises at a cost of 10d. per head, the average attendance being 24.

All patients are examined at the Clinic periodically and a report given to the manager as to their progress and working capacity.

During the year 7 new tuberculous employees commenced work and 5 others ceased as follows :—

- 1 obtained work in the open labour market.
- 3 broke down in health (2 re-admitted to sanatorium).
- 1 discharged as unsuitable.

*Loss of Time due to Tuberculous Disability.*—Of the 32 employees on the pay roll at 31st December, 1936, 13 were off work some part of the year by reason of ill-health as shown in the following table :—

	No. Employed.	Worked Full Time.	Absent owing to sickness.
Firewood department— (All males)—			
Canvassers .. ..	5	2	3 lost 30 days.
Bundlers, sawyer, and labourer .. ..	13	7	6 lost 30 days.
Firelighter department—			
Female .. ..	1	—	Lost 24 days.
Brush department—			
Males .. ..	4	4	—
Printing department—			
Males .. ..	3	2	1 lost 76 days.
Females .. ..	3	2	1 lost 37 days.
Other employees—			
Males .. ..	3	2	1 lost 15 days.

The average time lost per head amongst the 32 tuberculous employees was 6.6 days in the year, the respective figure for each department being Firewood 3.3, Firelighter 24, Brushmaking nil, Printing 19, Other employees 5.

“**The Hollies.**”—This institution provides 40 beds for children suffering from slight forms of tuberculosis but most of them are admitted because of gross home contact which would probably lead to severe disease if much contact were not broken.

The number of children and results of treatment are shown on page 132.

**"The Hollies" Sanatorium School.**

PERIOD ENDED 31st DECEMBER, 1936.

(Ministry of Health Form T.145 (D)—modified).

				Remaining Jan. 1st, 1936.	Admitted.	Discharged. †	Remaining Dec. 31st, 1936.	
Pulmonary	Boys	{	Under 5	..	..	..	..	
			Over 5	..	6	9	8	7
	Girls	{	Under 5	..	1	5	3	3
			Over 5	..	6	14	10	10
Non-Pulmonary	Boys	{	Under 5	..	..	1	..	1
			Over 5	..	..	2	1	1
	Girls	{	Under 5	..	..	2	1	1
			Over 5	..	1	..	1	..
Observation Cases	Boys	{	Under 5	..	..	7	4	3
			Over 5	..	8	17	22	3
	Girls	{	Under 5	..	4	8	9	3
			Over 5	..	7	19	21	5
Totals .. ..				33	84	80	37	

† Includes 1 transfer to Killingbeck Sanatorium.

**ANALYSIS OF CASES DISCHARGED.**

**DURATION OF RESIDENTIAL TREATMENT.**

(Ministry of Health Form T.145 (G)—modified).

		Pulmonary.			Non-Pulmonary.			Total.
		Disease Quies- cent.	Disease Im- proved.	Disease not Im- proved.	Disease Quies- cent.	Disease Im- proved.	Disease not Im- proved.	
1-3 months.	Boys	Under 5	..	..	..	..	..	..
		Over 5	..	..	..	..	..	..
	Girls	Under 5	..	..	..	..	..	..
		Over 5	..	..	..	..	..	..
3-6 months.	Boys	Under 5	..	..	..	..	..	..
		Over 5	..	..	I	..	..	I
	Girls	Under 5	..	I	..	..	..	I
		Over 5	I	..	..	..	..	I
6-12 months.	Boys	Under 5	..	..	..	..	..	..
		Over 5	6	I	..	..	..	7
	Girls	Under 5	I	..	..	I	..	2
		Over 5	3	2	..	..	..	5
Over 12 months.	Boys	Under 5	..	..	..	..	..	..
		Over 5	..	I	..	..	..	I
	Girls	Under 5	..	..	..	..	..	..
		Over 5	I	I	..	..	I	3
	Totals	12	6	..	I	2	..	21

# St. Mary's Infirmary.

PERIOD ENDED 31ST DECEMBER, 1936.

(Ministry of Health Form T.145 (D) modified).

		Remaining Jan. 1st, 1936.	*Admitted.	†Dis- charged.	Died.	Remaining Dec. 31st, 1936.
Pulmonary	Males .. ..	12	110	62	43	17
	Females .. ..	4	50	43	8	3
Non-Pulmonary	Males .. ..	..	..	..	..	..
	Females .. ..	..	..	..	..	..
Observation Cases	Males .. ..	..	4	4	..	..
	Females .. ..	..	2	2	..	..
	Totals .. ..	16	166	111	51	20

\*Includes transfers from Gateforth Sanatorium (2).

†Includes transfers to Killingbeck and Gateforth Sanatoria (41).

## ANALYSIS OF CASES DISCHARGED.

### DURATION OF RESIDENTIAL TREATMENT.

(Ministry of Health Form T.145 (G)—modified).

		Pulmonary Tb. Disease.							Non-Pulmonary Tb. Diseases.			Total.
		T.B. Minus.			T.B. Plus.			Quies-cent.	Im-proved.	Not Im-proved.		
		Quies-cent.	Im-proved.	Not Im-proved.	Quies-cent.	Im-proved.	Not Im-proved.					
1-3 months.	Males .. ..	..	2	4	..	11	6	..	..	..	23 12	
	Females .. ..	..	2	..	..	8	2	..	..	..		
3-6 months.	Males .. ..	..	2	..	..	5	1	..	..	..	8 2	
	Females .. ..	..	1	..	..	1	..	..	..	..		
6-12 months.	Males .. ..	..	..	..	..	..	..	..	..	..	.. 1	
	Females .. ..	..	..	..	..	1	..	..	..	..		
Over 12 months.	Males .. ..	..	..	..	..	..	..	..	..	..	.. ..	
	Females .. ..	..	..	..	..	..	..	..	..	..		
	Totals .. ..	..	7	4	..	26	9	..	..	..	46	

NOTE.—Nearly all the cases transferred to Sanatorium were in hospital for less than 28 days.

Their schooling is uninterrupted and it seems certain that the increase of physical fitness is accompanied by more rapid educational improvement than would be likely under ordinary conditions. The only cases of infectious disease during the year were six cases of mild diphtheria, and as all children are now immunised on or before admission it is unlikely that much further trouble will occur from this disease.

The happiness of the children is obvious testimony to the devotion to duty of the nursing and teaching staff. The following details have been supplied by the Head Teacher :—

Number of children on school register	..	75
(Boys 31, girls 44)		
Number of school sessions	.. ..	506
(253 morning and afternoon respectively)		
Average number on school register	..	39.43

**St. Mary's Infirmary.**—The beds at this institution are used for chronic infectious cases requiring isolation, and patients who are acutely ill but for whom there is no vacancy in sanatorium at the time.

The accommodation for 6 females and 18 males has been fully occupied, and at times there has been a list of patients awaiting admission.

The number of patients treated, and an analysis of those discharged are shown on page 133.

## SANATORIA.

**Killingbeck Sanatorium** (Report by Dr. W. Stanton Gilmour).—The official accommodation has risen this year to 242 beds, since the opening of the new female ward. A considerable waiting list of women has taken some time to reduce since then.

The total number of cases treated during the year was 656, comprising 288 males, 232 females, and 136 children, as compared with a total of 700 for the previous year. Of the 656 cases treated, 64 were non-pulmonary cases divided as follows :—male 23,

female 16, children 25. The average percentage of bed cases was 70.42. The average length of stay of patients was : non-pulmonary 42 weeks and pulmonary 30 weeks. The averages for 1935 were 37 weeks and 27 weeks respectively. Patients to the number of 157 were examined by the Dental Surgeon during the year and 477 attendances for treatment were made.

*Other work done :—*

Pneumothorax and air replacement, 72 cases, 1,336 refills.  
Gold cases 68. Number of injections 930.

Phrenic evulsion, 17. Other operations, including thoracoplasty and bone grafts, 26.

Examinations of sputa, pus, etc., at Leeds Medical School and St. James's Hospital, 87.

Sputum examinations at Killingbeck, 539.

X-Ray examinations ; films, 547, screenings, 1,702.

The general lines of routine and special treatment remain much the same. As indicated in the list above, surgical procedure has again been carried out in both pulmonary and non-pulmonary disease. It is hoped that in the near future a thoracoscope will be purchased for the operating theatre at St. James's Hospital, which will improve results in artificial pneumothorax treatment, making it possible to deal with adhesions.

The temporary arrangement for the treatment of adult bone and joint cases in a special hospital outside Leeds has relieved pressure on beds. On the other hand, it will be more satisfactory when the department is able to provide its own accommodation for the treatment of these cases.

The need for a more efficient X-Ray plant and better laboratory facilities, which was indicated in last year's report, is still present.

The new female ward of 100 beds was opened by Mr. Geoffrey Shakespeare, Parliamentary Secretary to the Ministry of Health, on July 9th, 1936. This ward replaces the 82 beds occupied by women at Old Killingbeck, and thus provides a further 18 beds. The almost ideal accommodation has made treatment easier for the staff and promotes a more cheerful attitude in the patients, which should produce beneficial results. A complete description of the new ward appears on page 116.



*School.*—The attendance in the special school has been as high as last year. The methods of teaching have been the same, but it had been increasingly difficult for the two teachers to instruct their respective classes in the same schoolroom. Teaching has been made easier since the juniors were transferred to a room in Ward K8.

*Administration.*—Since April 1st, 1936, the nursing staff has been gradually increased to a number which would meet the need for the application of 54 hours week for day staff and 60 hours week for night nurses, in accordance with the resolution of the City Council. The problem of accommodation has been partially solved by an arrangement for the laundry workers to live out. Meantime, the nursing staff occupy the original nurses' home and the greater part of the maids' home. Of the remaining maids, the majority are housed in the Old Hall, temporary extra accommodation being provided there in the rooms which had been recreation and dining rooms for the female patients. The need for more and better accommodation has been acknowledged and steps are being taken for the erection of a new Nurses' Home.

Dr. H. J. Partington, senior residential medical officer, left to take up an appointment at Middleton-in-Wharfedale Sanatorium, after three years service, and Dr. G. F. Barran was appointed to take over his duties. Miss L. Clegg, assistant matron, retired because of ill-health, and she has been succeeded by Miss M. G. Burns.

By arrangement with St. James's Hospital, Miss E. Beeley has been appointed as part-time masseuse here.

*Acknowledgments.*—Concert parties and other entertainers remained loyal to the patients during the year, and the Rev. Edmund Beabey, A.K.C., the Honorary Chaplain, must again be thanked for his continued interest in organising these activities. Gifts in kind at Christmas time have been as generous as in previous years. A portable Gaumont-British talking cinema was given to the patients by Mr. W. E. Layland: this will be a very valuable source of enjoyment, particularly to the bed-patients. Again I wish to thank the staff at Killingbeck for their loyalty, and the staffs of the Health Department, the Health Clinic, and St. James's Hospital, for their co-operation.

**Killingbeck Sanatorium.**

PERIOD ENDED 31ST DECEMBER, 1936.

(Ministry of Health Form T.145 (D)—modified).

				Remain- ing Jan. 1st, 1936.	Admitted. *	Discharged †	Died.	Remain- ing Dec. 31st, 1936.
Pulmonary.	Males	..	..	79	168	120	49	78
	Females	..	..	73	137	98	21	91
	Boys	.. {	Under 5	3	1	2	..	2
			Over 5	15	21	24	..	12
	Girls	.. {	Under 5	5	2	5	..	2
Over 5			6	17	9	2	12	
Non-Pulmonary	Males	..	..	14	9	12	3	8
	Females	..	..	8	8	9	3	4
	Boys	.. {	Under 5	1	1	1	..	1
			Over 5	5	7	8	1	3
	Girls	.. {	Under 5	1	..	..	..	1
Over 5			7	3	3	..	7	
Observation Cases.	Males	..	..	2	16	12	..	6
	Females	..	..	1	5	4	..	2
	Boys	.. {	Under 5	..	1	1	..	..
			Over 5	6	18	21	..	3
	Girls	.. {	Under 5	..	4	3	..	1
Over 5			2	10	9	..	3	
Totals				228	428	341	79	236

\*Includes transfers from Gateforth (5), St. Mary's (40), Other Institutions (1).

†Includes transfers to Gateforth (20).

**ANALYSIS OF CASES DISCHARGED.****DURATION OF RESIDENTIAL TREATMENT.**

(Ministry of Health Form T.145 (G)—modified).

		Pulmonary Tb. Disease.						Non-Pulmonary Tb. Diseases.			Total.
		T.B. Minus.			T.B. Plus.						
		Quies- cent.	Im- proved.	Not Im- proved.	Quies- cent.	Im- proved.	Not Im- proved.	Quies- cent.	Im- proved.	Not Im- proved.	
1-3 months.	Males .. ..	2	6	..	..	10	6	..	..	..	24
	Females .. ..	2	3	2	..	3	4	..	1	..	15
	Children { Under 5	..	..	..	..	..	..	..	..	..	..
		Over 5	1	3	1	..	..	..	..	..	1
3-6 months.	Males .. ..	5	5	1	2	19	5	1	2	..	40
	Females .. ..	6	3	..	1	11	4	..	..	..	25
	Children { Under 5	..	..	1	..	..	..	1	..	..	2
		Over 5	3	2	..	..	..	..	..	1	1
6-12 months.	Males .. ..	..	2	..	1	15	4	..	5	..	27
	Females .. ..	3	7	3	..	21	7	2	2	..	45
	Children { Under 5	1	3	..	..	..	..	..	..	..	4
		Over 5	6	4	1	..	1	..	..	2	..
Over 12 months.	Males .. ..	..	1	..	..	7	2	1	1	..	12
	Females .. ..	1	..	1	..	8	5	1	1	1	18
	Children { Under 5	..	1	..	..	..	..	..	..	..	1
		Over 5	1	3	..	..	..	1	2	2	..
	Totals .. ..	31	43	10	4	95	38	8	17	3	249

The above figures include 19 (Male) transfers to Gateforth Sanatorium and the further period of treatment is shown in the table for that Institution.

### Killingbeck Sanatorium.

#### GRADE OF EXERCISE ATTAINED BY ADULT CASES.

	Males.	Females.	Total.
No exercise .. .. .	24	44	68
Walking .. .. .	35	17	52
Work { Grade A.* .. .. .	39	30	69
{ Grade B.† .. .. .	6	..	6
{ Grade C.‡ .. .. .	4	..	4
Treatment not completed .. ..	24	16	40
Total .. .. .	132	107	239

\* Light work in wards and garden, or vocational.

† Slightly heavier than "A."

‡ Moderately heavy work in wards and garden.

(Includes transfers to other Institutions).

**Gateforth Sanatorium** (Report by Dr. A. C. Meek).—The accommodation for adult male patients remains at 55 beds, except during winter months, when six unheated single-bed huts are not in use.

The usual routine treatment of walking exercise and work has been continued, supplemented in suitable cases by artificial pneumothorax and "gold" injections. A few cases of surgical tuberculosis have also been under treatment.

During the past year an electrical heating installation has been introduced in the large outdoor huts, and has been greatly appreciated by the patients.

The patients' dining room was much improved in appearance and convenience by the provision of a new set of tables and chairs.

As usual, much useful work has been carried out by the patients, especially in the care of the grounds and livestock.

Produce to the value of £217 has been used in the Institution, and sales of pigs, eggs, and poultry have realised a sum of £151.

Egg production has fallen to 30,801, as compared with 40,364 in 1935.

# Gateforth Sanatorium (Males only).

PERIOD ENDED 31ST DECEMBER, 1936.

(Ministry of Health Form T.145 (D) modified).

	Remaining Jan. 1st, 1936.	Admitted.*	Dis- charged.†	Died.	Remaining Dec. 31st, 1936.
Pulmonary ..	48	66	69	1	44
Non-Pulmonary ..	3	1	3	..	1
Observation Cases..	..	11	10	..	1
Totals .. ..	51	78	82	1	46

\* Includes transfers from other Institutions (21).

† Includes transfers to other Institutions (7).

## ANALYSIS OF CASES DISCHARGED.

### DURATION OF RESIDENTIAL TREATMENT.

(Ministry of Health Form T.145 (G)—modified).

PULMONARY T.B. DISEASE.							NON-PULMONARY T.B. DISEASES.			Total.
	T.B. Minus.			T.B. Plus.			Quies- cent.	Im- proved.	Not Im- proved.	
	Quies- cent.	Im- proved.	Not Im- proved.	Quies- cent.	Im- proved.	Not Im- proved.				
-3 months ..	5	1	..	..	3	2	..	..	..	11
3-6 months ..	5	5	..	..	8	1	..	1	..	20
6-12 months..	1	6	..	..	5	1	..	..	..	13
Over 12 mths.	4	2	..	1	11	2	1	..	..	21
Total ..	15	14	..	1	27	6	1	1	..	65

includes transfers to various institutions and the further period of treatment is shewn in those tables.

## GRADE OF EXERCISE ATTAINED BY PATIENTS ON DISCHARGE.

Cases who completed treatment. Grade.						Treatment not completed.	Total.
1	2	3	4	5	6		
7	4	..	2	15	22	22	72

NOTE.—Patients take walking exercise until 2 hours per day are done without symptoms. Six grades of manual work are then carried out, the last grade involving 6 hours normal work without any rest period,



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## Maternity and Child Welfare.

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## MATERNITY AND CHILD WELFARE.

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Though unable, as I was last year, to report an infant mortality rate which was the lowest on record, the fact that the rate for 1936 is only one above that for the previous year is a source of considerable gratification. In 1935, the infant mortality rate was 64, last year it was 65 per thousand live children born. Compared with previous years that is a low figure, but compared with many other towns in the country it is still very high. Even allowing for the comparatively high rate of death in the first month, which in 1936 be it noted showed a considerable improvement on previous years, the wastage of infant life is still too great. The cause is largely inherent in the social conditions of that section of the community which provides the majority of the births, and I am very hopeful that as these conditions improve, as with the advance of the Corporation's programme of slum clearance they are bound to do, the rate will show a considerable further diminution. Meanwhile every effort is being made through the Infant Welfare Centres, and here I should like to pay tribute to the helpful co-operation of the Leeds Babies' Welcome Association, to inculcate in the mothers the elements of wise parent-craft and to give them an appreciation of the fundamental value of health to the growing and developing baby.

As far as the maternal mortality rate is concerned, here we have no reason to be dissatisfied. The rate for 1936 was 3.13 which is one of the lowest on record and lower than the majority of the towns of similar size in England and Wales. It would be futile to pretend that it is beyond improvement, and I am very hopeful that with the added effort about to be made to provide a more efficient midwifery service for the people, and to give better facilities for the supervision, both ante-natally and post-natally, of mothers that the rate will fall still further during the next quinquennium.

**Statistics.**—The number of children under one year of age who died in 1936 was 476 (males 279 and females 197) as compared with 463 (males 251 and females 212) for 1935. The infant mortality rate was 65 as compared with 64 for the previous year and an average of 76 for the previous five years.

## INFANT MORTALITY.

Year.	Deaths under one year.	RATE PER 1,000 BIRTHS.	
		LEEDS.	England and Wales.
1890	2,128	173	151
1891	2,216	177	149
1892	2,114	168	148
1893	2,542	206	159
1894	1,945	156	137
1895	2,384	191	161
1896	2,120	169	148
1897	2,454	190	156
1898	2,372	183	160
1899	2,222	172	163
1900	2,397	183	154
1901	2,429	188	151
1902	2,113	160	133
1903	1,992	153	132
1904	2,207	176	145
1905	1,875	152	128
1906	1,837	152	132
1907	1,533	131	118
1908	1,654	138	120
1909	1,350	123	109
1910	1,446	133	105
1911	1,679	159	130
1912	1,051	102	95
1913	1,469	135	108
1914	1,324	124	105
1915	1,253	127	110
1916	1,216	129	91
1917	1,023	135	96
1918	984	133	97
1919	899	119	89
1920	1,232	110	80
1921	997	98	83
1922	935	101	77
1923	773	89	69
1924	921	108	75
1925	748	91	75
1926	748	93	70
1927	629	81	70
1928	606	79	65
1929	722	97	74
1930	512	68	60
1931	552	76	66
1932	617	88	65
1933	537	81	64
1934	513	71	59
1935	463	64	57
1936	476	65	59

INFANTILE MORTALITY DURING THE ELEVEN YEARS 1926-1936 AT DIFFERENT PERIODS OF  
THE FIRST YEAR OF LIFE.

YEAR.	Births in year.	Under one week.		Under one month.		One and under three months.		Three and under six months.		Six and under nine months.		Nine and under twelve months.		Under one year.	
		Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
1926	8,065	187	23.2	312	38.7	134	16.6	118	14.6	96	11.9	88	10.9	748	93
1927	7,790	170	21.8	274	35.2	103	13.2	87	11.2	84	10.8	81	10.4	629	81
1928	7,665	201	26.2	286	37.3	102	13.3	94	12.3	72	9.4	52	6.8	606	79
1929	7,426	210	28.3	314	42.3	111	14.9	107	14.4	108	14.5	82	11.0	722	97
1930	7,568	208	27.5	291	38.5	74	9.8	57	7.5	49	6.5	41	5.4	512	68
1931	7,219	172	23.8	233	32.3	92	12.7	86	11.9	80	11.1	61	8.4	552	76
1932	7,004	189	27.0	255	36.4	110	15.7	100	14.3	85	12.1	67	9.6	617	88
1933	6,643	175	26.3	243	36.6	99	14.9	80	12.0	57	8.6	58	8.7	537	81
1934	7,190	185	25.7	252	35.0	85	11.8	55	7.6	69	9.6	52	7.2	513	71
1935	7,211	182	25.2	239	33.1	88	12.2	62	8.6	41	5.7	33	4.6	463	64
1936	7,340	166	22.6	220	30.0	70	9.5	87	11.9	54	7.4	45	6.1	476	65

Compared with the other large towns in England and Wales, Leeds equal with Hull occupied fourth place, the towns with lower rates being Bristol, Sheffield and Birmingham, and with higher, London, West Ham, Stoke-on-Trent, Liverpool, Manchester, Bradford, Nottingham, and Newcastle. (See page 17).

The rate for England and Wales was 59 or 9·2 per cent. lower than the rate for Leeds.

*Death rates in Quarters.*—The infant mortality rate for the four quarters of the year is given in the accompanying table.

	I.	II.	III.	IV.	Year.
1926 .. ..	120	78	75	100	93
1927 .. ..	104	70	66	83	81
1928 .. ..	84	60	77	99	79
1929 .. ..	142	84	79	84	97
1930 .. ..	80	62	54	76	68
1931 .. ..	105	62	57	83	76
1932 .. ..	103	77	74	100	88
1933 .. ..	107	62	67	90	81
1934 .. ..	91	53	70	72	71
1935 .. ..	75	63	70	49	64
1936 .. ..	94	69	40	57	65

The infant mortality rate for the third quarter was the lowest on record.

*Causes of Death.*—The principal causes contributing to the infant death-rate in order of numerical importance were premature birth, pneumonia, and diarrhoea and enteritis. An examination of the list of causes of death given on page 152 discloses the fact that 106 or 22·3 per cent. of the total deaths under one year of age were due to the respiratory group of diseases—pneumonia, bronchitis, whooping cough and influenza. Last year the number was 89, or 19·2 per cent., and the average for the previous five years, was 115 or 21·4 per cent. As compared with the previous

year, the principal increase in the causes of death in infancy was pneumonia which was responsible for 69 deaths, 18 more than in the previous year.

Prematurity still remains the most important single cause of death, the number of deaths attributable to it being 114 or 23·9 per cent. of the total as compared with 124, or 26·8 per cent. for the previous year.

The following table shows the number of deaths from prematurity and the death-rate per thousand births for the years 1926-1936.

Year.	Births.	Deaths from prematurity.	Death-rate per 1,000 births.
1926 .. ..	8,065	149	18·5
1927 .. ..	7,790	146	18·7
1928 .. ..	7,665	169	22·0
1929 .. ..	7,426	173	23·3
1930 .. ..	7,568	152	20·1
1931 .. ..	7,219	114	15·8
1932 .. ..	7,004	128	18·3
1933 .. ..	6,643	134	20·2
1934 .. ..	7,190	121	16·8
1935 .. ..	7,211	124	17·2
1936 .. ..	7,340	114	15·5

The average death-rate from prematurity per thousand births for the ten years 1926-1935 was 19·1.

Pneumonia (all forms) was the second most important single cause of death, 69 or 14·5 per cent. of the total being attributable to this disease, as compared with 51, or 11·0 per cent., for the previous year, and an average of 87, or 14·8 per cent., for the previous decade.

The deaths from diarrhoea and enteritis numbered 65, or 13·7 per cent. of the total deaths under one year, as compared with 58, or 12·5 per cent., for the previous year, and an average of 77, or 13·1 per cent., for the previous decade.

*Deaths in Age Groups.*—Of the total (476) infant deaths, 80, or 16·8 per cent., took place on the first day of life ; 166, or 34·9 per cent., in the first week ; 220, or 46·2 per cent., in the first month ; 70, or 14·7 per cent., between one and three months ; 87, or 18·3 per cent., between three and six months ; 54, or 11·3 per cent., between six and nine months ; and 45, or 9·5 per cent., between nine and twelve months.

The percentage changes in the infant death-rates per 1,000 births in 1936 as compared with the average of the previous ten years are as follows :—

Under 1 week decrease	11·4%	3-6 months, increase	3·5%
Under 1 month    ,,	18·0%	6-9        ,,    decrease	26·0%
1-3 months        ,,	29·6%	9-12       ,,        ,,	26·5%
Whole year decrease, 18·8%			

It is interesting to note the changes which have taken place at the various age periods of infancy since the quinquennium 1905-1909. These are set out in the table on page 151. The quinquennial average has been taken in order to make a better comparison.

*Neo-Natal Death-rate.*—The number of deaths of infants occurring in the first month of life was 220, or 19 less than in the previous year, and the neo-natal rate was 30·0.

Of the total deaths under one year, 46·2 per cent. occurred in the first month as compared with 51·6 for the previous year, and of the deaths in the first month 36·4 per cent. occurred on the first day, 75·5 per cent in the first week and 86·4 per cent. in the first two weeks.

The deaths in the first month were largely due to prematurity and other congenital defects.

The reduction in the neo-natal rate to a figure lower than has ever previously been attained is extremely gratifying and encourages one to hope that there will be a still further decline in this rate in the coming years.



*Illegitimate Death-rate.*—Of the 385 illegitimate births, 44, or 11·4 per cent., died before reaching the age of one year which is equal to an infant mortality rate of 114. This is an increase of 6 per thousand as compared with 1935 and a decrease of 28 as compared with 1934.

**Maternal Mortality.**—The number of mothers who lost their lives in childbirth during the year was 24, the same number as for the previous year. The corresponding maternal mortality rate per thousand live births was 3·27 as compared with 3·33 for the previous year and an average of 3·97 for the previous five years. Calculated on the total number of births (live and still) the rate for the year was 3·13 as compared with 3·18 for the previous year and an average of 3·79 for the previous five years. This figure compares favourably with the rates published for the other large towns.

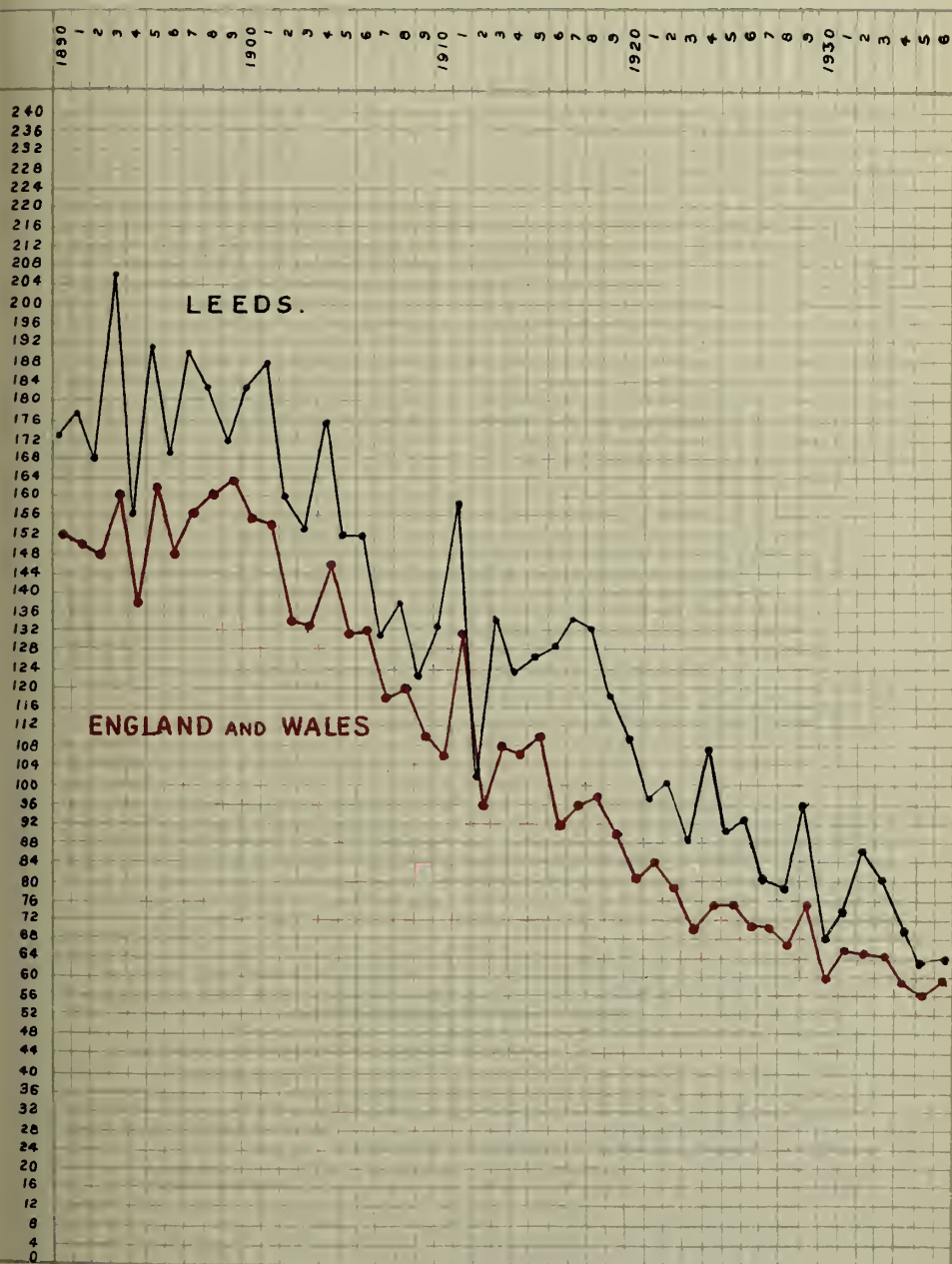
The following table shows the maternal mortality rate per thousand live births and per thousand total (live and still) births for the last eight years.

MATERNAL MORTALITY.

Year.	No. of deaths.	Rate per 1,000 live births.	Rate per 1,000 total (live and still) births.
1929 .. ..	33	4·44	4·23
1930 .. ..	32	4·23	4·05
1931 .. ..	39	5·40	5·14
1932 .. ..	21	3·00	2·86
1933 .. ..	27	4·06	3·87
1934 .. ..	29	4·03	3·86
1935 .. ..	24	3·33	3·18
1936 .. ..	24	3·27	3·13

The provisional maternal mortality rates for England and Wales were: per thousand live births 3·81, and per thousand total births (live and still) 3·65.

# INFANT MORTALITY PER 1000 BIRTHS, 1890 - 1936.





WARD.	Births in year.	Under one day.		Under one week.		Under one month.		One and under three months.		Three and under six months.		Six and under nine months.		Nine and under twelve months.		Under one year.	
		Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
Mill Hill and South	195	3	15.4	3	15.4	5	25.6	..	..	4	20.5	2	10.3	2	10.3	13	67
Westfield ..	320	..	..	6	18.8	8	25.0	..	..	6	18.8	4	12.5	3	9.4	21	66
Blenheim ..	260	1	3.8	5	19.2	6	23.1	..	26.9	3	11.5	4	15.4	1	3.8	21	81
Central ..	304	3	9.9	8	26.3	9	29.6	3	9.9	6	19.7	2	6.6	7	23.0	27	89
Woodhouse ..	298	2	6.7	4	13.4	5	16.8	3	10.1	1	3.4	2	6.7	2	6.7	13	44
North ..	380	2	5.3	6	15.8	8	21.1	1	2.6	4	10.5	1	2.6	1	2.6	15	39
Far Headingley ..	190	..	..	3	15.8	4	21.1	2	10.5	3	15.8	4	21.1	2	10.5	15	79
Hyde Park ..	182	2	11.0	3	16.5	3	16.5	2	11.0	2	11.0	..	..	2	11.0	9	49
Kirkstall ..	314	4	12.7	6	19.1	10	31.8	1	3.2	5	15.9	2	6.4	2	6.4	20	64
Burmantofts ..	377	7	18.6	9	23.9	12	31.8	3	8.0	8	21.2	8	21.2	2	5.3	33	88
Harehills ..	335	3	9.0	8	23.9	10	29.9	4	11.9	2	6.0	2	6.0	..	..	18	54
Potternewton ..	213	5	23.5	7	32.9	7	32.9	1	4.7	2	9.4	..	..	..	..	10	47
Roundhay ..	231	2	8.7	3	13.0	3	13.0	..	..	..	..	1	4.3	..	..	4	17
Cross Gates and Templenewsam	253	6	23.7	9	35.6	13	51.4	1	4.0	3	11.9	1	4.0	..	..	18	71
Richmond Hill ..	336	8	23.8	13	38.7	17	50.6	8	23.8	8	23.8	4	11.9	5	14.9	42	125
Osmondthorpe ..	369	2	5.4	7	19.0	11	29.8	4	10.8	4	10.8	2	5.4	2	5.4	23	62
East Hunslet ..	277	2	7.2	6	21.7	6	21.7	5	18.1	3	10.8	1	3.6	2	7.2	17	61
Hunslet Carr and Middleton ..	409	7	17.1	14	34.2	16	39.1	5	12.2	7	17.1	1	2.4	3	7.3	32	78
West Hunslet ..	237	3	12.7	4	16.9	8	33.8	3	12.7	1	4.2	4	16.9	3	12.7	19	80
Beeston ..	221	1	4.5	7	31.7	9	40.7	1	4.5	..	..	..	..	..	..	10	45
Holbeck (South)	177	3	16.9	4	22.6	6	33.9	..	..	2	11.3	..	..	1	5.6	9	51
Holbeck (North)	299	3	10.0	8	26.8	12	40.1	2	6.7	3	10.0	5	16.7	1	3.3	23	77
Armley and New Wortley ..	333	1	3.0	6	18.0	7	21.0	4	12.0	3	9.0	1	3.0	1	3.0	16	48
Upper Armley ..	211	3	14.2	3	14.2	6	28.4	4	19.0	2	9.5	..	..	..	..	12	57
Bramley ..	308	4	13.0	8	26.0	10	32.5	3	9.7	3	9.7	1	3.2	2	6.5	19	62
Farnley and Wortley ..	311	3	9.6	6	19.3	9	28.9	3	9.6	2	6.4	2	6.4	1	3.2	17	55
City ..	7,340	80	10.9	166	22.6	220	30.0	70	9.5	87	11.9	54	7.4	45	6.1	476	65

## BIRTHS AND DEATHS UNDER ONE YEAR WITH RATES.—CALENDAR YEAR 1936.

WARD.	TOTAL BIRTHS (nett).	Birth rate per 1,000 population.	No. of legitimate births.	No. of illegitimate births.	Total deaths under one year (nett).	Death rate per 1,000 births.	No. of legitimate deaths under one year.	Legitimate death rate per 1,000 legitimate births.	No. of illegitimate deaths under one year.	Illegitimate death rate per 1,000 illegitimate births.
Mill Hill and South	195	13.00	180	15	13	67	13	72	..	..
Westfield ..	320	18.14	293	27	21	66	19	65	2	74
Blenheim ..	260	12.08	206	54	21	81	16	78	5	93
Central ..	304	16.34	269	35	27	89	23	86	4	114
Woodhouse ..	298	16.32	282	16	13	44	11	39	2	125
North ..	380	20.59	367	13	15	39	14	38	1	77
Far Headingley ..	190	20.59	184	6	15	79	12	65	3	500
Hyde Park ..	182	9.64	171	11	9	49	5	29	4	364
Kirkstall ..	314	14.26	303	11	20	64	18	59	2	182
Burmantofts ..	377	18.08	356	21	33	88	30	84	3	143
Harehills ..	335	14.42	319	16	18	54	18	56	..	..
Potternewton ..	213	11.11	194	19	10	47	9	46	1	53
Roundhay ..	231	11.68	227	4	4	17	4	18	..	..
Cross Gates and										
Templenewsam	253	15.40	248	5	18	71	18	73	..	..
Richmond Hill ..	327	16.82	327	9	42	125	38	116	4	444
Osmondthorpe ..	369	16.86	350	19	23	62	22	63	1	53
East Hunslet ..	277	15.72	262	15	17	61	15	57	2	133
Hunslet Carr										
and Middleton..	409	18.97	392	17	32	78	31	79	1	59
West Hunslet ..	237	13.88	232	5	19	80	17	73	2	400
Beeston ..	221	13.04	214	7	10	45	9	42	1	143
Holbeck (South)	177	12.86	172	5	9	51	7	41	2	400
Holbeck (North)	299	17.72	288	11	23	77	22	76	1	91
Armsley and New										
Wortley..	333	16.83	316	17	16	48	14	44	2	118
Upper Armsley ..	211	12.48	201	10	12	57	12	60	..	..
Bramley ..	308	15.26	301	7	19	62	19	63	..	..
Farnley and										
Wortley..	311	15.13	301	10	17	55	16	53	1	100
City ..	7,340	14.99	6,955	385	476	65	432	62	44	114

PERCENTAGE CHANGES (5 YEAR PERIODS, ALSO YEARS 1935 AND 1936) IN THE INFANT DEATH-RATE  
per 1,000 BIRTHS AS COMPARED WITH THE AVERAGE OF THE FIVE YEARS 1905-1909.

Five year period.	Under one week		Under one month.		One and under three months.		Three and under six months.		Six and under nine months.		Nine and under 12 months.		Under one year.	
	Rate.	Percentage increase or decrease over 5 years period 1905-1909.	Rate.	Percentage increase or decrease over 5 years period 1905-1909.	Rate.	Percentage increase or decrease over 5 years period 1905-1909.	Rate.	Percentage increase or decrease over 5 years period 1905-1909.	Rate.	Percentage increase or decrease over 5 years period 1905-1909.	Rate.	Percentage increase or decrease over 5 years period 1905-1909.	Rate.	Percentage increase or decrease over 5 years period 1905-1909.
1905- 1909	26.2	—	44.3	—	25.5	—	28.0	—	23.0	—	18.6	—	139	—
1910- 1914	26.6	+1.5%	44.1	-0.5%	24.7	-3.1%	23.9	-14.6%	20.1	-12.6%	18.0	-3.2%	131	-5.8%
1915- 1919	26.4	+0.8%	44.4	+0.2%	21.5	-15.7%	25.0	-10.7%	19.7	-14.3%	17.9	-3.8%	129	-7.2%
1920- 1924	23.8	-9.2%	42.3	-4.5%	17.9	-29.8%	16.1	-42.5%	13.2	-42.6%	11.6	-37.6%	101	-27.3%
1925- 1929	24.3	-7.3%	38.2	-13.8%	15.1	-40.8%	13.4	-52.1%	11.5	-50.0%	10.1	-45.7%	88	-36.7%
1930- 1934	26.1	-0.4%	35.8	-19.2%	12.9	-49.4%	10.6	-62.1%	9.5	-58.7%	7.8	-58.1%	77	-44.6%
Year 1935	25.2	-3.8%	33.1	-25.3%	12.2	-52.2%	8.6	-69.3%	5.7	-75.2%	4.6	-75.3%	64	-54.0%
Year 1936	22.6	-13.7%	30.0	-32.3%	9.5	-62.7%	11.9	-57.5%	7.4	-67.8%	6.1	-67.2%	65	-53.2%



## DEATHS FROM STATED CAUSES UNDER ONE YEAR OF AGE.

Causes of death.	Year 1935.	Year 1936.	Increase or decrease.	Percentage of total deaths under one.
Smallpox .. ..	..	..	..	..
Chickenpox .. ..	..	1	+ 1	0.21
Measles .. ..	1	14	+13	2.94
Scarlet Fever .. ..	..	1	+ 1	0.21
Whooping Cough .. ..	27	18	- 9	3.78
Diphtheria .. ..	2	4	+ 2	0.84
Influenza .. ..	1	1	..	0.21
Erysipelas .. ..	4	4	..	0.84
Tuberculous Diseases .. ..	5	5	..	1.05
Meningitis .. ..	6	1	- 5	0.21
Convulsions .. ..	13	15	+ 2	3.15
Bronchitis .. ..	7	15	+ 8	3.15
Pneumonia (all forms) .. ..	51	69	+18	14.50
Other diseases of Respiratory Organs .. ..	3	3	..	0.63
Diarrhoea and Enteritis .. ..	58	65	+ 7	13.66
Gastritis .. ..	3	..	- 3	..
Syphilis .. ..	4	5	+ 1	1.05
Rickets .. ..	1	1	..	0.21
Suffocation, including overlying .. ..	18	12	- 6	2.52
Injury at birth .. ..	10	18	+ 8	3.78
Atelectasis .. ..	18	6	- 12	1.26
Congenital Malformations .. ..	45	40	- 5	8.40
Premature birth .. ..	124	114	- 10	23.95
Atrophy, Debility, and Marasmus .. ..	28	22	- 6	4.62
Other Causes .. ..	34	42	+ 8	8.82
Totals .. ..	463	476	+13	100.00

# MATERNITY AND CHILD WELFARE SERVICES INCLUDING SUPERVISION OF MIDWIVES.

BY

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Officer of Health for Maternity and Child Welfare.*

**Number of Midwives.**—The total number of midwives on the register at December 1935 was 89 ; 23 new names were added during the year ; 9 did not renew their notification to practice ; 21 left the district, leaving a total on the register at December 31st 1936 of 82.

The actual number of midwives who practised in the area during the year was 72, of whom 32 were attached to Institutions, Nursing Homes, Associations, etc. Seventy (or 97·2 per cent.) of those were trained, and 2 (or 2·8 per cent.) untrained.

The number of births attended by midwives was 2,131 or 27·2 per cent. of the total births registered, as compared with 2,063 or 26·6 per cent. during the previous year.

The following table gives an analysis of the cases attended by midwives :—

TRAINED.			UNTRAINED.	
70 midwives (of which 32 are attached to Institutions, Nursing Homes, etc.).			2 midwives.	
Total cases attended .. 2,094			Total cases attended .. 37	
Average per midwife 30 cases.			Average per midwife 18 cases.	
No. of Cases.	Practising on their own account.	Attached to Nursing Homes or Associations.	No. of Cases.	Practising on their own account.
Over 200	..	..	Over 200	..
„ 150	..	..	„ 150	..
„ 100	4	1	„ 100	..
„ 75	2	3	„ 75	..
„ 50	6	2	„ 50	..
„ 25	5	4	„ 25	1
„ 10	5	7	„ 10	1
„ 5	6	8	„ 5	..
Under 5	10	7	Under 5	..

Thirty-one trained midwives (18 attached to Institutions, Nursing Homes or Associations) took no cases during the year.

*Inspection of Midwives.*—The total number of inspections made during the year was 246, of which 176 were routine inspections and 70 special visits.

On 85 occasions midwives were interviewed in connection with breaches of the rules of the Central Midwives Board, and other minor misdemeanours; 15 were reported to the Senior Medical Officer for Maternity and Child Welfare, and 10 were interviewed by her.

One Leeds midwife was reported to the Central Midwives Board by another authority where she had been doing locum work. Her Leeds record was also given, and her name removed from the Midwives roll.

*Advising Medical Help.*—Notifications of having advised medical assistance were received in 905 cases, which may be classified as follows :—

Illness during pregnancy or abortion	..	..	81
Malpresentation	..	..	32
Delayed or obstructed labour	..	..	148
Ruptured perineum	..	..	173
Retained membrane or placenta	..	..	16
Hæmorrhage	..	..	43
Convulsions, eclampsia	..	..	1
Puerperal rise of temperature	..	..	39
Illness of mother during puerperium	..	..	54
Illness of child..	..	..	112
Infants—discharging eyes	..	..	78
Artificial feeding	..	..	32
Death of infant under ten days	..	..	30
Still-births	..	..	44
Suspected infectious disease	..	..	22
Maternal deaths	..	..	—

*Midwives Emergencies.*—During the year 580 claims were made by medical practitioners in the city for attendance on emergencies of labour under Section 14 of the Midwives Act, 1918. Of these 470 were dealt with at a total cost to the Corporation of £370 16s. 3d.

*Accouchement Sets.*—Two sets of sterilised maternity outfits, a large and a small, are supplied to mothers through the Welcomes, midwives and the Health Department. The small one can be provided free of charge, or at assisted rates, to necessitous cases.

A total of 289 outfits were supplied, 120 of the larger size, and 169 of the smaller. Of the latter, 80 were issued free, and two were given at reduced price, the total cost to the Corporation being £12 4s. od.

*Nursing in the Home.*—The yearly grant continued to be paid to the Leeds District Nursing Association, who undertake to nurse in their own homes cases of puerperal fever, puerperal pyrexia, mastitis, ophthalmia neonatorum, pemphigus, pneumonia and otitis media. A total of 609 cases was attended to in this way during the year.

*Infectious Diseases.*—Particulars are given in the following table of the cases of infectious diseases dealt with.

#### INFECTIOUS DISEASES.

	Puerperal Fever.	Puerperal Pyrexia.	Ophthalmia Neona- torum.	Pemphigus.
Number of cases notified .. ..	76	107	59	24
Number of cases recovered .. ..	65	104	59	22
Number of cases died .. ..	11	3	..	2
Number of cases of vision impaired .. ..	..	..	1	..
Number of cases result not known.. (out of city)	..	..	..	..
Number occurring in				
Doctors' practice .. ..	16	5	3	..
,,     ,,   midwives'     ,, ..	9	6	23	17
,,     ,,   institutions .. ..	51	96	33	7
Number with handywomen in attendance .. ..	2	1	1	..
Number of cases where District Nurse was asked to attend .. ..	3	1	18	..
Number removed to Hospital .. ..	22	8	1	1
Number of cases visited .. ..	47	84	31	24
Number of attendant midwives disinfected .. ..	15	12	..	13
Number of attendant handywomen disinfected .. ..	..	..	..	..

*Puerperal Fever.*—A total of 76 cases of puerperal fever was notified during 1936. This is a larger number than has ever previously occurred in a single year. The number for 1935 was 55.

Of these 76 cases, 51 were Leeds cases and 25 were patients from outside the city who were in Leeds institutions.

As regards the place of delivery, 27 were delivered in their own homes, 33 in Leeds Maternity Hospital, 2 in St. James's Hospital, one in St. Mary's Infirmary, 4 in Nursing Homes, 5 occurred after abortion, and in four cases the delivery was attempted at home, but completed in the Maternity Hospital.

*Home Deliveries of Leeds Cases.*—Of the 19 Leeds cases delivered at home, 7 were attended by a midwife, 9 by a doctor and midwife, 2 by a doctor and a handywoman, and one was unattended. As regards the type of delivery, 4 were normal, 1 was normal but had slight post-partum hæmorrhage, and 3 were normal, but one mother had scarlet fever, one was in poor health, and one had a husband with a septic thumb. In 9 cases delivery was by forceps one was a case of twins, and two had retained placenta. Of the remainder, one had lacerations following delivery, and the other post-partum hæmorrhage following a twin delivery.

Of the total, 11 were removed to hospital and 8 were nursed at home. All of them recovered.

*Hospital Deliveries of Leeds Cases.*—Two cases occurred after delivery in St. James's Hospital, one a Cæsarean section and the other a normal delivery in a mother in poor health. The former patient died.

One case occurred after a normal delivery in St. Mary's Infirmary, but the mother had a septic focus elsewhere.

Of the notified cases 22 were confined in the Maternity Hospital and all were stated to be booked cases. In 7 cases the delivery was normal, but in 2 the mother had a septic focus, and in 3 the mother was in poor health. There was in addition, 1 case of sepsis after miscarriage in an ill woman, 1 after retained placenta, 2 after breech delivery, 8 after forceps delivery, and 3 after Cæsarean section. One of the last mentioned died.

In 2 cases delivery had been attempted at home, and failed, and the patients had been sent to hospital; one was an impacted breech and the mother died; the other was a difficult forceps case, where the child had hydrocephalus.

Of the remaining Leeds cases, 2 occurred after delivery in a Nursing Home, and were removed to the Maternity Hospital later, while 3 occurred after abortion.

*Out-of-Leeds Cases.*—Of these, 11 were delivered in the Maternity Hospital, 4 were normal deliveries, 1 had a retained placenta, 1 had hæmorrhage, 2 were Cæsarean sections, 1 was a difficult labour with ruptured uterus, and in two the type of delivery is not known.

Of the remainder, two cases were delivered in Nursing Homes; seven were delivered in their own homes; four were abortions, and one was a failed forceps delivered at home. All were later removed to hospital.

*Municipal Midwives.*—There were no midwives actually employed by the Health Department, but there continued in operation the arrangement between the Corporation and the Maternity Hospital, whereby provision is made for the maintenance of five district midwives in the city. The total number of cases dealt with by these midwives was 392, viz.:—

Burmantofts	..	..	..	110
New Wortley	..	..	..	90
Woodhouse	..	..	..	85
West Street	..	..	..	60
Hunslet	..	..	..	47

*Midwives Act, 1936.*—The object of this new Act is to safeguard the life and health of mothers by creating a qualified and efficient midwifery service.

Briefly, the scheme proposed for Leeds is as follows: there will be an area in the centre of the city around the Maternity Hospital served by seven whole-time midwives controlled by the Hospital and their cases will be utilised for the district training of medical students and pupil midwives. In this area there will also be two municipal midwives for maternity nursing and such other cases as may be required. The nett cost of the Hospital midwives will be borne by the Corporation, who as the Local Supervising Authority will also supervise their work.



The remainder of the city will be divided into districts, each district being served by one, two or three midwives, according to the number of births in the district. Taking as a guide the suggested number of 80 cases per midwife (60 as a midwife and 20 as a maternity nurse) it has been calculated that 35 midwives will be required for the city, seven employed through the agency of the Maternity Hospital and 28 directly by the Local Authority.

The salary will be £200 per annum, rising to a maximum of £250 by increments of £10. In addition there will be annual allowances of £10 for uniform, £5 travelling expenses, and £5 telephone. Increments will not be automatic, but will be awarded strictly on service and efficiency. In this way, a good midwife will be assured of recompense commensurate with her work, and the less efficient midwife will suffer correspondingly.

It is anticipated that about 12 midwives will be required for the teaching of pupil midwives and medical students, and these teacher-midwives will have an additional £20 per annum added to their salary.

The fees fixed for attendance as a midwife is £2, and for attendance as a maternity nurse £1 15s. od. The Local Authority or the Leeds Maternity Hospital will recover the fee from the patient or person liable for her maintenance, but will remit the whole or part of the fee in cases where there is financial stress. A scale of assessment has been agreed to by the Council.

The scheme will come into operation on August 1st, 1937.

*Compensation Paid to Midwives.—*

	Midwives.		Cases.		Cost.		
					£	s.	d.
Suspension for infection (half fee)	1	..	1	..	1	0	0
Cases referred from ante-natal clinic to hospital (half fee) ..	21	..	24	..	23	16	6
Cases referred by private doctor to hospital (half fee) ..	1	..	1	..	1	0	0
Necessitous cases (whole fee less proportion already paid by parent) .. .. .	40	..	65	..	123	19	7

*Handywomen.*—During the year, three handywomen were visited and warned as to limitations of practice. Two were seen in connection with cases of puerperal fever.

On the coming into force of the new Midwives Act, the handy-woman should disappear, as it will then be a penal offence for any person who is not a certified midwife, or a registered nurse, to receive remuneration for attending a woman in childbirth, or any time during the 14 days immediately after childbirth. The only risk remaining is that the grandmother or kindly neighbour may still attend, provided always that no payment is received.

*Home Helps.*—The scheme for the provision of Home Helps continued in operation.

Applications for this service are rapidly increasing. During 1936, the number of mothers provided with Home Helps was 84 as compared with 32 in 1935, while the number of women employed as Home Helps rose from 11 in 1935 to 22 in 1936.

The cost to the Corporation was £263 2s. 1d. of which £22 8s. 2d. was refunded by the patients.

A register of Home Helps is kept. When an application is received, the mother is visited by the Health Visitor, and a report made on the home and the necessity for the service. The mother then sees the Almoner, who takes the case to the Almoning Committee, and the assessment is made in the usual way. A Home Help is then booked for the time the mother requires. There is one difficulty, and that is that delivery does not always occur on the date it is expected, to allow for which a margin is generally left at the time of booking. Frequently the date is so far out that a rearrangement often at the last minute is necessary.

Applications come from all parts of the city, and it is naturally impossible to have Home Helps within easy access of all who desire their services. An endeavour is made however to book the Home Help nearest the home where she is required so as to reduce the cost of travelling.

**Ante-Natal Work.**—A total of 2,924 expectant mothers attended the ante-natal clinics during the year, an increase of 148 on the figure for last year. Of the total 2,336 were new, and attended for the first time. The attendances at the Clinics totalled 9,961, as compared with 9,315 for 1935.

The appended table gives an analysis of the new cases admitted during the year to the registers of the different Clinics, with particulars as to the sources of the recommendations, and the percentage sent by midwives. The latter figure—last year 41·3—does not vary much from year to year. It will be interesting to see the effect of the new domiciliary service on this figure.

NEW CASES ADMITTED TO THE REGISTERS OF THE ANTE-NATAL CLINICS DURING 1936, AND BY WHOM RECOMMENDED.

Welcome.	Midwife.	Self.	Hospital.	Welcome Dr.	Private Dr.	Health Visitor.	Total.	Percentage sent by Midwife.
Ellerby ..	84	76	4	1	..	4	169	47·7
West Street	13	52	4	..	..	..	69	18·8
Burmantofts	113	29	7	..	1	1	151	74·8
Hunslet ..	101	14	3	2	1	17	138	73·2
University ..	125	69	12	1	2	19	228	54·8
Woodhouse..	86	41	5	7	1	21	161	53·4
Holbeck ..	76	49	12	4	3	29	173	43·9
Armley ..	4	206	8	1	3	5	227	1·8
Barrack House ..	47	89	48	2	3	2	191	24·6
St. Nicholas	127	18	11	..	..	10	166	76·5
Bramley ..	20	112	6	..	11	14	163	12·3
New Wortley	33	47	13	..	..	9	102	32·4
Middleton ..	58	46	4	..	2	33	143	40·6
West Hunslet	32	59	6	..	2	32	131	24·4
Cross Gates..	4	18	..	..	1	1	24	16·7
Burley ..	36	17	9	1	..	3	66	54·5
Halton ..	..	6	..	..	..	..	6	..
Kirkstall ..	6	18	..	..	3	1	28	21·4
TOTAL ..	965	966	152	19	33	201	2,336	41·3

Particulars of the work at the ante-natal clinics are set out in the following table :—

### EXPECTANT MOTHERS ON REGISTERS.

Welcome.	No. on register at beginning of year.	Registered during year.	Live Births.		On register end of year.	Total attendance of expectant mothers.
			Full Term.	Premature.		
Ellerby ..	30	169	141	7	36	671
West Street ..	21	69	67	4	15	226
Burmantofts ..	33	151	141	3	32	630
Hunslet..	26	138	112	10	39	476
University ..	61	228	202	14	59	850
Woodhouse ..	35	161	133	5	40	730
Holbeck ..	31	173	134	5	58	724
Armley ..	82	227	217	10	61	1,446
Barrack House..	43	191	174	8	47	688
St. Nicholas ..	30	166	140	7	36	578
Bramley ..	46	163	118	8	56	846
New Wortley ..	40	102	107	7	16	508
Middleton ..	34	143	126	8	33	505
West Hunslet ..	43	131	123	5	37	677
Crossgates ..	4	24	19	1	7	47
Burley ..	18	66	59	2	17	255
Halton ..	7	6	9	2	2	27
Kirkstall ..	4	28	12	3	16	74
Totals ..	588	2,336	2,034	109	607	9,958

Of the 2,924 mothers on the register 30 miscarried and 78 had still births.

In addition to the above 3 expectant mothers paid 3 visits to Meanwood Centre where no ante-natal clinic is held, making a total of 9,961 attendances.

Included in the number of live births are 31 sets of twins.

When any abnormality is found at the ante-natal clinic, the mother is referred to a consultant, her own doctor, or a hospital. Particulars of these cases for the different clinics are given on page 163.

The reasons for expectant mothers being referred to the various hospitals is given in the table appended.

ANTE-NATAL CLINICS, 1936.  
WOMEN REFERRED TO INSTITUTIONS BECAUSE OF ABNORMALITY.

Reason for Sending	Ante-natal Institution	Obstetrical Institution	General Hospital	Municipal Hospital	Total
Albuminuria and Toxaemia .. ..	7	5	..	29	41
Contracted pelvis and disproportion .. ..	6	25	..	6	37
Malpresentation and twins .. ..	5	8	..	3	16
Previous bad obstetrical history ..	..	5	..	..	5
Ante-partum hæmorrhage and placenta prævia ..	..	3	..	4	7
Cardiac disease .. ..	7	5	..	3	15
Varicose veins .. ..	1	..	..	1	2
Vaginal discharge ..	3	1	1	1	6
Threatened miscarriage	..	1	3	2	6
General debility and anaemia .. ..	1	..	1	5	7
Miscellaneous medical reasons ..	8	14	10	12	44
TOTAL .. ..	38	67	15	66	186

It was found that the most frequent reasons for referring cases to hospital during the ante-natal period were albuminuria and cardiac disease. The largest number of cases referred to hospital for confinement were due to contracted pelvis and disproportion. A total of 186 women were referred for in-patient hospital treatment from the ante-natal clinics. The figure for 1935 was 195.

Milk has been supplied to necessitous expectant mothers in the last three months of pregnancy. This was supplied free to 377 mothers and at full or assisted rates to 157.

The question of the provision of meals for nursing and expectant mothers has had the attention of the Maternity and Child Welfare Committee quite recently. Owing, however, to the difficulties, principally for the mothers themselves, it was resolved that it would be wiser for the present to give additional milk throughout the whole of pregnancy, and also to provide eggs for those mothers who were obviously in need of extra nourishment.

NUMBER OF WOMEN REFERRED ON ACCOUNT OF ABNORMALITIES.

Clinic.	Armley.	St. Nicholas.	Hunslet.	West Street.	New Wortley.	University.	Burnancliffe.	Ellerby.	Woodhouse.	Holbeck.	Barrack House.	Bramley.	Middleton.	West Hunslet.	Burley.	Haltom.*	Crossgates.*	Kirkstall.*	Total.
To whom referred :—																			
Consultant (including consultant medical staff of Hospital) ..	13	20	14	2	11	..	6	10	14	28	4	6	6	17	..	1	..	1	153
V. D. Officer .. ..	3	6	4	1	..	1	3	..	..	4	1	1	1	1	..	..	..	..	26
T. B. Officer .. ..	..	..	2	..	1	..	3	1	1	..	1	..	1	..	..	1	..	..	11
General Practitioner ..	4	4	5	1	2	4	1	1	5	..	3	2	..	3	..	3	1	1	40
Special Ante-natal Institutions (with reasons, separate table)	..	1	2	..	1	5	3	6	6	3	4	3	1	..	2	..	1	..	38
Special Obstetric Institutions (with reasons, separate table)	3	8	7	1	..	..	8	11	3	..	8	11	6	..	..	..	..	1	67
General Hospital (with reasons, separate table)	..	..	1	..	1	..	..	..	2	..	2	..	1	..	..	1	..	..	8
Obstetrical reasons ..	..	..	..	..	..	..	..	..	..	2	..	..	1	1	..	3	..	..	7
Non Obstetrical reasons ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Municipal Hospitals (with reasons, separate table)	16	..	..	..	..	1	3	8	1	..	1	18	1	..	2	1	..	..	52
Obstetrical reasons ..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	3	..	..	14
Non Obstetrical reasons ..	2	..	..	..	..	1	2	2	1	..	..	..	..	..	..	..	..	..	..

\* Haltom, Crossgates and Kirkstall have no special ante-natal clinic, but occasional expectant mothers are seen at the infant session.



*Hæmoglobin Estimations.*—An investigation is being carried out at three centres into the hæmoglobin content of the blood of expectant mothers, and its relationship to their health during pregnancy, labour, the puerperium and lactation.

The three centres chosen are Ellerby, in a poor district, West Hunslet, in a better class area, and Barrack House where a large percentage of the mothers are Jewish.

Sufficient cases have not yet been completed for definite conclusions to be arrived at, but the following table gives the percentages of hæmoglobin at the first visit to the Clinic in 113 cases.

Percentage of Hæmoglobin	West Hunslet.	Ellerby.	Barrack House.	Total.
Under 50% ..	2 } 13·7%	.. } 13·5%	.. } 4·0%	2 } 11·5%
50%-59% ..	5 }	5 }	1 }	11 }
60%-69% ..	17 } 70·6%	11 } 75·7%	9 } 72·0%	37 } 72·6%
70%-79% ..	19 }	17 }	9 }	45 }
80%-89% ..	7 } 15·7%	4 } 10·8%	4 } 24·0%	15 } 15·9%
90%-99% ..	1 }	.. }	2 }	3 }
TOTAL ..	51	37	25	113

It will be noted from the above that the majority of all the mothers (72·6 per cent.) had a hæmoglobin content of 60-80 per cent., and this holds good for all three clinics. Barrack House showed the smallest percentage with under 60 per cent. hæmoglobin, and the highest percentage over 80.

The findings at Ellerby and West Hunslet Clinics are more similar than one would have expected considering the difference in the homes and incomes of the mothers.

*Consultative Ante-Natal Clinic.*—A total of 63 women were referred to the clinic during the year, as compared with 53 for the previous year. Of these, 48 were referred by clinic doctors and 15 by private doctors.

The following table gives the reasons for sending patients :—

Contracted pelvis, disproportion (real or suspected)	21
Abnormal presentations .. .. .	14
Albuminuria .. .. .	7
Previous bad obstetrical history .. .. .	5
Medical complications of pregnancy .. .. .	3
Diagnosis of pregnancy .. .. .	3
Post-natal consultations.. .. .	3
Miscellaneous .. .. .	7

All the 48 births were live births, two being twin deliveries. There were no stillbirths, but one died in early infancy from injury at birth at home and one died later in hospital from congenital syphilis and enteritis.

Of the 48 births, 25 took place at home, and 23 in hospital. In 4 cases version was performed, in 2 cases labour was induced, 3 were forceps deliveries, and 4 Cæsarean sections.

There was one maternal death after a normal delivery at home. The cause of death was toxic psychosis and puerperal endometritis.

Of the remaining 15 cases, 3 were post-natal, 2 came for diagnosis and were found not to be pregnant, and the remaining 10 are not yet delivered or cannot be traced.

**Natal Work**—Of the total 7,340 births occurring during the year, 3,753, or 51·13 per cent., took place in institutions of nursing homes in the city. This figure is somewhat less than in 1935 when the percentage was 55·2.

It will be interesting to note the effect of the institution of a municipal domiciliary midwifery service on the number of confinements in hospital. The fact that the fee for the municipal midwife will be in accordance with income will probably have some influence. There can be no doubt that one of the attractions of hospital is the cheapness of the service, the payments for the patient's keep and all the attention during her confinement and the lying-in period being in most cases considerably less than the cost of confinement in her own home.

While it is essential that there should be adequate hospital accommodation for ante-natal cases, abnormal labours, and mothers with unsatisfactory homes, there are many normal confinements which could just as safely and satisfactorily be delivered at home as in a crowded hospital. With the improvement in the housing

conditions of the working classes resulting from the demolition of insanitary property there is no longer the same justification for confinement in hospital.

**Specialist Service.**—The number of claims received from consultants for services rendered in connection with the Corporation's Maternity Scheme was 40. Of these, 27 were dealt with and the total nett cost to the Corporation was £72 10s. 9d.

**Maternity and Nursing Homes.**—The number of registered nursing homes in the city on December 31st, 1935, was 24, and on December 31st, 1936, 24, made up as follows: Maternity Homes 9, Maternity and General Nursing Homes 11, General Nursing Homes 4.

The following table gives particulars as to the registration of maternity and nursing homes during 1936:—

	Maternity Homes.	Other Nursing Homes.
No. of existing registered Homes on January 1st, 1936 .. .. .	20	4
No. of applications for registration ..	..	1
No. of Homes registered .. .. .	..	1
No. of Orders made refusing or cancelling registration .. .. .	..	..
No. of Appeals against such Orders ..	..	..
No. of Cases in which such Orders have been :—		
(a) Confirmed on appeal .. .. .	..	..
(b) Disallowed .. .. .	..	..
No. of applications for exemption from registration .. .. .	3	1
No. of Cases in which exemption has been :—		
(a) Granted .. .. .	3	1
(b) Withdrawn .. .. .	..	..
(c) Refused .. .. .	..	..
No. of Cases in which registration voluntarily surrendered .. .. .	..	1
Existing registration extended to include registrations as—	..	..

All registered homes were visited regularly and inspected, the number of visits paid for this purpose being 56. Three homes were visited in connection with the infringement of the Nursing Homes Registration Act.

**Ambulance Service.**—For the number of cases removed to the various lying-in Institutions by the special ambulance provided and maintained for the purpose see page 49.

**Maternal Mortality.**—During the year 24 mothers lost their lives in childbirth. This is the same number as last year. The rate of mortality for the city was 3·27 per thousand live births, and 3·13 per thousand total births (live and still). The corresponding figures for 1935 were 3·33 and 3·18 respectively.

Of the 24 deaths, 9 were due to sepsis, of which 3 were after abortion, 1 was due to toxæmia and sepsis, 6 were due to hæmorrhage, one to toxæmia and hæmorrhage, two to toxæmia, two to anæsthetic, one to pulmonary embolism, one to ruptured ectopic gestation, and one from adherent pericarditis and myocarditis following a placenta prævia (vide table on page 168).

The maternal mortality rate for the ante-natal clinics was 1·4 per thousand births, and 1·35 per thousand total births (live and still).

As in previous years, it was noted that financial circumstances did not affect maternal mortality to any great extent, for of the 24, 11 were in comfortable, 5 in fairly good, 7 in poor circumstances, and 1 was destitute.

Of the 10 cases in which sepsis occurred, 3 were after abortion 1 was after a normal delivery at home where there had been no ante-natal care and no attendant at the time of labour. The case of toxæmia and sepsis was a normal delivery at home with a slight perineal tear. Of the remaining five, 1 was an occipito posterior presentation where forceps delivery at home had failed and the patient was sent into hospital; two were after Cæsarean sections, one having attended the hospital ante-natal clinic regularly, and the other had been late in booking; one was difficult breech delivery in hospital with craniotomy performed for hydrocephalic head; and the remaining one was delivered in a nursing home, and there was a complete perineal tear.

## MATERNAL MORTALITY 1926-1936—CAUSES OF DEATH.

Year.	Sepsis.	Hæmorrhage.	Hæmorrhage and Sepsis.	Toxæmia.	Toxæmia and hæmorrhage.	Toxæmia Sepsis.	Embolism	Ruptured Ectopic	Obstetric Shock.	Ruptured Uterus.	Incomplete Abortion.	Other Causes.	Total.
1926 ..	13	6	..	5	3	..	2	1	1	1	2	2	36
1927 ..	13	9	1	7	..	..	4	1	1	..	1	..	37
1928 ..	17	7	..	5	..	..	1	2	1	1	..	2	36
1929 ..	8	6	2	9	..	..	5	2	..	1	..	..	33
1930 ..	10	8	..	10	..	1	..	2	..	..	..	1	32
1931 ..	17	8	..	9	..	1	2	1	..	..	..	1	39
1932 ..	8	3	..	3	1	..	4	..	1	..	..	1	21
1933 ..	16	1	..	2	1	..	..	2	..	3	..	2	27
1934 ..	16	3	..	5	..	..	1	2	1	1	..	..	29
1935 ..	8	4	..	3	..	..	5	..	2	..	..	2	24
1936 ..	9	6	..	2	1	1	1	1	..	..	..	3	24

In the seven cases in which hæmorrhage occurred, only one was after delivery at home, the remainder being in hospital, two after Cæsarean section.

The parity of the mothers who died was as follows :—

Para .. ..	1	2	3	4	5	6
Number ..	10	6	5	2	..	1

**Stillbirths and Neo-Natal Mortality.**—The number of stillbirths in 1936 was 347, or 4·6 per cent. of the total births notified, as compared with 391, or 5·0 per cent., for 1935.

The number of neo-natal deaths was 220, as compared with 239 in 1935, the corresponding rate being 30·0 as compared with 33·1 in 1935, and an average of 34·6 during the previous five years. As in former years, the largest number were due to prematurity which alone accounted for 103 deaths, or 46·8 per cent. of the total.

#### NEO-NATAL MORTALITY.

Cause of death	Under one week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total.
Congenital malformation	16	7	3	1	27
Premature birth ..	92	6	1	4	103
Atrophy, debility and marasmus .. ..	11	3	1	1	16
Atelectasis .. ..	6	..	..	..	6
Injury at birth ..	17	1	..	..	18
Suffocation including overlying .. ..	7	..	..	..	7
Diarrhoea-enteritis ..	..	..	4	3	7
Syphilis .. ..	..	..	1	..	1
Pneumonia .. ..	..	1	2	..	3
Convulsions .. ..	5	3	..	1	9
Other causes .. ..	12	3	3	5	23
	166	24	15	15	220

**Post-Natal Supervision.**—There is no separate post-natal clinic for mothers, but if any abnormality is suspected when a mother makes her first appearance with her infant, she is referred to the ante-natal clinic for examination, and if treatment is required, sent to her own doctor or to hospital.

Patients delivered in hospital are examined there post-natally four to six weeks after confinement.



The question of the establishment of post-natal clinics is at present under consideration.

As in previous years, mothers whose health was likely to be impaired by further pregnancies were referred to the Gynæcological Clinic at the Maternity Hospital, where they received advice and instructions in the use of contraceptives in accordance with the recommendations of the Ministry of Health embodied in Memorandum 1935-MCW. The number of Leeds cases who attended this Clinic during the year was 15.

**Home Visiting.**—The total number of visits paid by the health visitors during the year amounted to 134,508, as compared with 133,718 for the previous year. The number of health visitors (exclusive of probationers) was 35, and the average number of visits per health visitor 3,843.

A complete summary of the work of the health visitors is appended :—

	VISITS.
Notified births including re-visits .. ..	98,164
Stillbirths and deaths under one month including re-visits .. ..	757
Death investigations of children from one month—five years .. ..	585
Ophthalmia Neonatorum .. ..	110
Measles .. ..	7,788
Whooping Cough .. ..	935
Pneumonia .. ..	1,140
Epidemic Diarrhœa .. ..	—
Expectant Mothers .. ..	6,762
Special visits (medical aid claims 603, and others 975) .. ..	1,578
Visits to ill children notified from the Leeds General Infirmary and Public Dispensary..	589
Visits to children under the Children and Young Persons Acts, 1908-1932 .. ..	811
Ineffectual visits .. ..	15,289
Total visits for the year .. ..	<u>134,508</u>

## INFANT LIFE PROTECTION.

## CHILDREN AND YOUNG PERSONS ACTS, 1908-1932.

## CHILDREN NURSED FOR HIRE OR REWARD DURING THE YEAR 1936.

Number of foster-mothers on the register at the beginning of the year .. .. .	113
Number of foster-mothers on the register at the end of the year .. .. .	109
Foster-mothers with one child .. .. .	99
Foster-mothers with two children .. .. .	9
Foster-mothers with three children .. .. .	1

Number of children on the register at the beginning of the year .. .. .	121
Number of children placed on the register during 1936	77
Number of children who ceased, during the year to come under the provision of this Act .. .. .	63
Number of children transferred to other foster-mothers in Leeds .. .. .	15
Number of children on the books at the end of the year	120

DETAILS AS TO THE NUMBER OF CHILDREN WHO CEASED,  
DURING THE YEAR, TO COME UNDER THE PROVISIONS OF THE  
CHILDREN AND YOUNG PERSONS ACTS, 1908-1932.

Returned to parents or relatives .. .. .	38
Attained the age of 9 years .. .. .	9
Adopted without payment .. .. .	6
Sent to special homes, etc. .. .. .	3
Removed to other districts .. .. .	6
Died .. .. .	..
Foster-mothers removed with child—no trace.. .. .	1
TOTAL .. .. .	63

**Infant Life Protection.**—During the year 811 visits were paid to boarded out children by the health visitors, who are also the Infant Protection Visitors for the purposes of the Children and Young Persons Acts 1908-1932.

The table on page 171 gives particulars of the children nursed in the city for reward during 1936.

**Infant Welfare Centres.**—There are 19 Infant Welfare Centres situated in different parts of the city.

The building of the Health Centre at Middleton is proceeding, and it is hoped to have it completed and opened early next summer. This centre is for the joint use of the Maternity and Child Welfare and School Medical Departments. A description of the centre will be embodied in my next report.

*Attendances at Centres.*—The number of new babies under one year admitted to the Welcomes during 1936 was 4,667, between one and two years 492, and between two and five 862.

Of the total children born during the year, 63·6 per cent. attended at one or other of the Welcomes, as compared with 63·5 per cent. last year. The total number of names on the registers at the Welcomes at the commencement of the year was 9,756; during the year 6,021 new children were registered, making a total of 15,777. This total is an increase of 318 on the previous year.

The total attendances of all babies at all the Welcomes during the year was 110,161, an increase of 771 on the figure for 1935.

The infant mortality rate for infants attending the Welcomes was 31 as against 65 for the city.

*Infant Consultations.*—The number of infant sessions at one centre is five per week, at four 3, at ten 2, and at four 1.

*Medical Findings at the Welcomes.*—The table on page 176 gives details of the condition of children on their admission to the different Welcomes during 1936, with the percentages of normal children for each clinic. This year's percentage of 58·2 is slightly higher than that for 1935 (55·0). The table on page 177 indicates the defects discovered in children during the year. The total number of defects was 7,454, a figure which does not vary greatly from year to year; last year it was 7,821, so that the improvement though slight was in the right direction.

## BABIES UNDER ONE REGISTERED DURING YEAR 1936.

WELCOME.	0-1 month.	1-3 months.	3-6 months.	6-12 months.	Total.
Ellerby ..	115	104	22	17	258
West Street ..	96	90	23	20	229
Burmantofts ..	76	110	31	32	249
Hunslet ..	81	72	15	20	188
University ..	142	161	25	23	351
Woodhouse ..	145	92	37	27	301
Holbeck ..	150	98	12	46	306
Armley ..	158	138	33	30	359
Barrack House	233	272	65	39	609
St. Nicholas ..	105	76	8	26	215
Bramley ..	100	77	15	27	219
New Wortley ..	82	87	17	20	206
Middleton ..	110	41	15	21	187
Meanwood ..	26	50	31	8	115
West Hunslet	118	131	25	13	287
Cross Gates ..	24	36	13	22	95
Burley ..	122	106	33	27	288
Halton ..	29	57	8	18	112
Kirkstall ..	25	30	27	11	93
Totals ..	1,937	1,828	455	447	4,667

## BABIES OVER ONE REGISTERED DURING YEAR 1936.

WELCOME.	1-2 years.	2-3 years.	3-4 years.	4-5 years.	Total.
Ellerby ..	23	17	15	8	63
West Street ..	24	20	18	3	65
Burmantofts ..	23	9	12	7	51
Hunslet ..	15	7	9	5	36
University ..	52	42	36	29	159
Woodhouse ..	30	21	9	14	74
Holbeck ..	29	22	10	2	63
Armley ..	38	44	31	25	138
Barrack House	53	42	37	19	151
St. Nicholas ..	23	18	15	9	65
Bramley ..	21	14	11	2	48
New Wortley ..	23	9	9	7	48
Middleton ..	38	31	36	30	135
Meanwood ..	16	10	12	1	39
West Hunslet ..	23	19	14	8	64
Cross Gates ..	16	13	3	5	37
Burley ..	19	21	5	5	50
Halton ..	15	9	8	4	36
Kirkstall ..	11	7	8	6	32
Totals ..	492	375	298	189	1,354

ATTENDANCES MADE AT INFANT WELFARE CENTRES DURING  
YEAR 1936

WELCOME.	Consultations and meetings.			Morning treatment.			
	Mothers.	Babies under 1 year.	Babies 1—5 years.	Mothers.	Babies under 1 year.	Babies 1—5 years.	Callers.
Ellerby ..	4,392	2,565	1,353	2	683	70	202
West Street ..	936	3,187	2,234	25	577	223	83
Burmantofts ..	2,647	3,056	1,478	119	926	414	—
Hunslet ..	1,738	3,072	1,501	6	394	37	233
University ..	2,846	3,858	2,398	39	820	178	64
Woodhouse ..	2,485	4,733	2,239	36	596	63	43
Holbeck ..	1,668	3,842	1,507	194	1,146	163	356
Armley ..	2,318	4,582	2,947	384	1,478	1,731	413
Barrack House	3,483	7,835	4,408	3	1,563	39	96
St. Nicholas ..	2,180	2,989	1,443	13	503	98	580
Bramley ..	786	2,766	1,865	2	536	25	96
New Wortley..	871	2,375	1,436	5	560	165	144
Middleton ..	2,321	2,570	2,420	1	304	74	13
Meanwood ..	107	1,508	964	2	287	28	11
West Hunslet..	1,189	3,600	2,049	121	910	197	313
Crossgates ..	166	991	620	—	41	4	3
Burley ..	588	3,678	1,743	7	688	165	42
Halton ..	182	1,624	1,051	1	94	10	8
Kirkstall ..	114	1,139	561	20	161	23	9
Totals ..	31,017	59,970	34,217	980	12,267	3,707	2,709

As one would expect, the most prevalent conditions which have to be dealt with are feeding difficulties and minor digestive disorders. Rickets comes next in frequency, and following that bronchitis, skin diseases, malnutrition and debility.

*Nutrition Investigations.*—The investigation into the growth rate in babies on different diets mentioned in my last report is being continued. The figures are at present being analysed, but the results are not yet available.

**Child Guidance.**—There is at present no provision for the care and treatment of children of normal intelligence who present problems or are suffering from behaviour defects.

Although the establishment of a Child Guidance Clinic has been considered and talked of in the Department for several years, it was not until the February meeting of the Maternity and Child Welfare Committee that definite proposals for the establishment of such a clinic were submitted by the Medical Officer of Health.

It was pointed out that it was necessary that a Child Guidance Clinic should deal not only with the child under five, but should also cater for the school child and the juvenile delinquent. The proposals were approved in principle, and further consideration of the report was deferred for a conference with representatives of the Education Committee on the subject. A joint clinic to serve both departments is obviously desirable.

*Play Groups.*—At most of the Centres, play-groups are held during clinic hours. These are at present under the supervision of a trained psychiatric social worker, who advises the voluntary workers running each of the groups how to proceed. Although the numbers of children at the groups is small and variable, it is felt that they do form a useful part of the work in teaching the mother how her child should play. Throughout the whole period of growth, play is an important factor in satisfactory development, physical, mental and emotional. By its agency the child gains increasingly in manipulative skill, in powers of imagination and reasoning, and in the capacity to live at peace with himself and others.



## DEFECTS DISCOVERED IN NEW CASES ON ADMISSION TO THE CLINICS, IN 1936.

Condition.	Ellerby.	West Street.	Burmanlots.	Hunslet.	University.	Woodhouse.	Holbeck.	Armley.	Barack House.	St. Nicholas.	Bramley.	New Wortley.	Middleton.	Meanwood.	West Hunslet.	Crossgates.	Burley.	Halton.	Kirkstall.	Total.
Normal .. .. .	113	150	107	113	262	156	181	249	448	132	124	113	111	113	152	63	251	104	58	3,000
Malnutrition .. .. .	43	13	21	66	21	78	20	18	29	42	33	20	17	10	7	12	39	5	12	503
Debility .. .. .	11	2	21	1	2	2	23	17	1	1	20	19	13	5	5	8	15	2	5	67
Rickets .. .. .	19	5	14	16	5	23	20	20	20	13	9	19	17	15	17	11	6	8	1	235
Minor digestive disturbances .. .. .	81	32	84	13	11	60	20	41	77	13	60	5	17	15	1	3	11	29	1	615
Enlarged Tonsils and Adenoids .. .. .	2	1	7	4	2	10	3	1	2	6	4	4	4	2	1	3	3	8	14	48
Developmental defects .. .. .	52	7	52	7	8	22	13	12	11	1	44	13	4	12	19	4	4	2	2	278
Skin diseases .. .. .	6	2	1	4	5	10	11	6	7	7	7	7	4	2	9	4	4	2	1	114
Bronchitis .. .. .	2	5	2	5	1	7	6	6	14	3	1	..	10	2	..	1	5	1	..	67
Phimosis .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	58
Dental Caries .. .. .	1	1	4	10	3	8	34	3	3	10	2	..	4	..	1	..	..	..	3	36
Infant feeding difficulty .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	121
Inflammatory eye conditions .. .. .	11	8	3	3	5	5	8	21	6	5	3	13	6	12	8	2	5	..	2	113
Umbilical Hernia .. .. .	..	..	..	..	23	4	14	32	1	4	1	14	3	1	23	2	1	..	..	122
Otorrhoea .. .. .	..	..	..	..	2	2	3	3	8	2	12	2	1	1	5	1	13	1	4	106
Prematurity .. .. .	8	7	18	8	1	5	3	2	1	1	..	2	..	1	1	1	..	..	..	13
Squint .. .. .	..	..	..	..	..	5	2	2	..	..	..	..	..	..	..	..	..	..	..	4
Infectious Diseases .. .. .	..	..	..	..	..	1	1	..	..	1	1	9	2	..	1	..	..	..	..	13
Acute Gastro Enteritis .. .. .	1	2	3	1	..	1	1	..	..	..	1	..	..	..	17	..	..	..	..	37
Granulating Umbilicus .. .. .	..	..	..	2	..	2	7	..	..	..	..	..	1	..	..	..	..	..	..	2
Infantile Paralysis .. .. .	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	10
Nocturnal Enuresis .. .. .	..	..	..	..	..	..	1	2	..	..	1	..	1	..	..	..	..	..	..	7
Cervical Adenitis .. .. .	3	..	1	..	..	1	1	..	..	..	1	1	1	..	1	1	..	..	..	5
Mental Deficiency .. .. .	..	..	2	..	..	1	1	2	..	..	..	..	..	..	..	..	..	..	..	1
Abscess or minor sepsis .. .. .	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Mongol .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Worms .. .. .	..	..	..	..	..	1	2	..	..	..	..	1	..	..	..	..	3	..	..	10
Stomatitis .. .. .	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Veneral Disease .. .. .	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Nasal Catarrh .. .. .	..	..	..	..	..	1	1	..	..	..	..	..	..	..	3	..	1	..	..	6
Miscellaneous .. .. .	8	2	13	2	4	4	14	3	2	4	13	7	6	1	5	11	5	..	2	106
Total .. .. .	355	245	399	210	361	420	377	396	677	260	337	256	210	155	315	122	355	131	136	5,717
Total number of cases included in the above .. .. .	254	242	276	199	357	386	330	391	674	245	243	220	195	154	286	120	337	131	112	5,152
Percentage of Normal Children .. .. .	44.5	92.0	38.8	56.8	73.4	40.4	54.8	63.7	66.5	53.9	51.0	51.4	56.9	73.4	53.1	52.5	74.5	79.4	51.8	58.2

MEDICAL FINDINGS AT THE INFANT WELFARE CENTRES DURING, 1936.

Condition.	Elleby.	West Street.	Burmanlots.	Hunslet.	University.	Woodhouse.	Holbeck.	Armley.	Barwick House.	St. Nicholas.	Bramley.	New Wortley.	Middleton.	Meanwood.	West Hunslet.	Crossgates.	Burley.	Hallon.	Kirkstall.	Total.
Defect—																				
Malnutrition .. ..	74	32	61	20	20	55	11	17	18	37	47	10	14	1	8	14	22	12	10	485
Debility .. ..	24	26	17	56	41	35	13	37	11	..	27	23	40	5	24	15	12	13	25	317
Minor digestive disturbances ..	64	109	67	63	32	97	123	191	77	71	89	110	92	25	162	17	31	36	15	1,453
Rickets .. ..	..	52	41	11	42	44	58	48	63	26	34	40	69	13	149	11	30	11	17	1,402
Skin diseases .. ..	..	47	19	25	11	47	58	68	36	8	21	30	29	4	86	14	27	18	7	704
Bronchitis .. ..	46	58	38	74	12	47	58	68	36	17	29	5	8	13	29	7	14	15	8	704
Developmental defects .. ..	32	18	40	22	10	15	15	12	8	14	16	23	28	3	34	2	14	15	7	315
Enlarged tonsils and adenoids ..	29	13	15	12	35	39	14	39	26	14	8	16	23	5	26	4	24	8	7	382
Inflammatory eye conditions ..	16	13	12	11	11	22	23	46	19	13	6	16	11	3	11	1	15	3	4	208
Otorrhoea .. ..	17	24	11	10	9	13	12	23	17	9	13	19	23	1	23	1	15	6	2	204
Dental caries .. ..	11	14	4	3	18	6	14	23	9	5	13	5	1	..	1	1	3	6	4	204
Infectious disease .. ..	4	3	5	3	2	3	3	6	3	7	12	5	1	..	1	2	9	12	..	84
Acute gastro enteritis .. ..	9	5	8	..	..	15	26	17	4	..	7	1	3	..	1	5	..	..	..	61
Umbilical hernia .. ..	..	..	..	..	48	12	10	8	33	..	..	3	2	1	39	7	..	..	..	200
Phimosis .. ..	..	21	..	..	28	11	10	46	32	3	..	3	3	1	..	1	..	..	..	172
Squint .. ..	..	6	1	1	1	11	10	11	17	4	5	1	..	1	..	1	3	4	..	82
Adentitis .. ..	..	13	11	1	..	5	1	3	18	..	6	1	..	..	3	..	..	..	..	23
Mental deficiency .. ..	..	3	..	1	..	..	1	1	3	..	1	3	..	..	..	..	..	..	..	12
Tuberculosis .. ..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..
Rheumatism .. ..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Pneumonia .. ..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Worms .. ..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Prenatal .. ..	..	..	..	..	..	..	..	..	15	..	..	..	..	..	..	..	..	..	..	..
Infantile Paralysis .. ..	9	2	20	..	..	3	4	4	1	..	11	5	2	..	..	1	1	..	..	20
Granulating Umbilicus .. ..	..	..	1	..	..	1	2	2	1	..	..	..	..	..	..	..	..	..	..	58
Stomatitis .. ..	..	..	..	..	4	6	3	..	..	..	..	30	..	..	18	1	..	..	..	61
Anaemia .. ..	..	..	..	..	..	12	16	..	..	1	4	..	6	..	21	..	..	..	..	15
Nasopharynx Infection .. ..	..	..	12	..	..	..	..	..	..	..	..	..	..	..	45	..	..	..	..	52
Common Cold .. ..	..	..	..	..	26	..	23	..	..	11	..	35	..	..	42	..	..	..	..	87
Eurepsis .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	157
Rhinitis .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous .. ..	11	2	4	3	9	12	10	..	10	11	10	6	5	5	6	12	..	..	..	8
TOTALS .. ..	481	436	393	300	328	515	543	704	492	393	387	582	417	89	749	132	240	160	113	7,454

**Leeds Babies' Welcome Association.**—The Maternity and Child Welfare Department continued to work in close co-operation with the Leeds Babies' Welcome Association during the year. The services of the voluntary workers at the Welcomes continue to be most helpful and much appreciated. I take this opportunity of extending the thanks of the Maternity and Child Welfare Committee and the Health Department to the Association—President, Officers, Members of Committee and Helpers generally—for their valuable work throughout the year, and for their constant interest and support.

**Central Clinic.**—The work, as in previous years, included dental treatment to expectant and nursing mothers, and to children under five years; orthopædic consultations, artificial sunlight treatment, massage, electrical treatment and remedial exercises, diphtheria immunisation, venereal diseases treatment, and X-Ray clinic.

As compared with previous years there was an all-round increase in the work.

*Dental Clinic.*—The total number of new patients receiving dental treatment during the year was 819, and included 221 expectant mothers, 379 mothers and 219 children. The total for the previous year was 765.

The number of treatments was: expectant mothers 2,040, mothers 7,347 and children 909, a total of 10,296, as compared with 9,452 in 1935. Dentures were supplied to 358 mothers, of which 139 were full upper and lower dentures, 26 full upper only, 6 full lower only, 23 full upper and partial lower, 3 full lower and partial upper, and the remainder (161) partial plates, remodels and repairs.

The total cost to the Corporation was £302 11s. od. and £394 13s. 2d. was recovered from patients. The patients' payments include several claims brought forward from the previous year.

*Orthopædic Clinic.*—A total of 400 children was referred to this Clinic during the year. Most of the cases are seen at three monthly intervals to ascertain progress.

The total number of attendances at the Clinic was 857, an average of 17 per session.

The following table indicates the type of case which is referred by the Welcome doctors to this Clinic :—

Genu valgum	..	..	..	..	208
Talipes	..	..	..	..	27
Genu varum	..	..	..	..	23
Flat Feet	..	..	..	..	23
Different types of paralysis	..	..	..	..	23
General rickets	..	..	..	..	16
Torticollis	..	..	..	..	14
Deformities of spine	..	..	..	..	10
Deformities of hip	..	..	..	..	10
Miscellaneous	..	..	..	..	46
					<hr/>
					400
					<hr/>

Fifteen cases were referred to hospital for operation, and twelve cases were admitted to the Marguerite Home, Thorp Arch.

Appliances were supplied to 62 cases at a cost of £38 16s. 6d. of which £17 2s. 6d. was refunded by the parents.

Forty-nine cases were transferred to the School Orthopædic Clinic on reaching the age of five years.

Four trained masseuses attend regularly at Central Clinic and the various Welcomes, two of whom do artificial sunlight treatment as well as massage. During the year 13,348 massage treatments were given.

*Artificial Sunlight Treatment.*—This treatment is given at Central Clinic, Holbeck, Armley and Hunslet Welcomes. All cases are examined by the doctors in charge before being put on treatment, they are also seen during the course of treatment, and before being discharged.

The following table indicates the numbers attending those Clinics :—

Clinic.	Under 1 year.	2-5 years.	Total children.	Mothers.	Total treatments.
Central ..	28	541	569	8	6,987
Holbeck ..	9	156	165	..	2,024
Armley ..	10	158	168	..	2,625
Hunslet ..	27	90	117	..	1,765
TOTAL ..	74	945	1,019	8	13,401

This shows an increase of 166 children treated, and an increase of 2,911 treatments as compared with the figures for last year.

Two new up-to-date Hanovia lamps were installed at Central Clinic in March, and one of a similar type at Holbeck in August to replace lamps which were old and obsolete.

*X-Ray Clinic.*—As the X-Ray plant had worn out, in September arrangements were made for all X-Ray work to be done at St. James's Hospital. This has worked very well.

Before the discontinuance at Central, a total of 96 cases were examined, comprising 57 expectant mothers, 1 adult and 38 children.

*Venereal Diseases Clinic.*—The total number of patients referred to this Clinic during the year was 48, which included 19 expectant mothers, 10 mothers and 19 infants. The attendances made totalled 130—43 for mothers, 57 for expectant mothers and 30 for children.

**Milk Distribution.**—Particulars respecting the amount of liquid and dried milk supplied to mothers attending the Welcomes are given in the appended tables.

The Almoning Committee met on 51 occasions, and considered 6,243 applications. This is 7 less than in the previous year. Details of the work of the milk staff are given in the table appended.

## AMOUNT OF DRIED MILK DISTRIBUTED IN LBS. (YEAR 1936).

WELCOME.	Free.	Assisted.	Full Price.	Issued through Public Assistance Committee.	TOTAL.
Ellerby .. ..	1,555	1,805	904	526	4,790
West Street ..	1,804	1,096	352	432	3,684
Burmantofts ..	1,708	1,471	736	409	4,324
Hunslet .. ..	1,228	993	997	266	3,484
University ..	2,645 $\frac{1}{4}$	1,227 $\frac{1}{4}$	1,114 $\frac{1}{2}$	645	5,632
Woodhouse ..	1,643	1,283	906	509	4,341
Holbeck .. ..	1,021	1,104	858	363	3,346
Armley .. ..	773	417	913	69	2,172
Chapeltown ..	2,847 $\frac{1}{4}$	1,800	1,982 $\frac{3}{4}$	932	7,562
St. Nicholas ..	1,603 $\frac{1}{2}$	1,115 $\frac{1}{2}$	631 $\frac{3}{4}$	342	3,692 $\frac{3}{4}$
Bramley .. ..	300	497	725	50	1,572
New Wortley ..	898	721	180	183	1,982
Middleton ..	2,567	1,332	227	257	4,383
West Hunslet ..	485	468	383	78	1,414
Crossgates ..	282	255	160	52	749
Burley .. ..	195	97	252	2	546
Halton .. ..	259	115	454	229	1,057
Kirkstall ..	12	9	10	13	44
External .. ..	850	142 $\frac{1}{4}$	76	109	1,177 $\frac{1}{4}$
Totals .. ..	22,676	15,948	11,862	5,466	55,952

## NUMBER OF RECIPIENTS, YEAR 1936 (DRIED MILK).

WELCOME.	Free.	Assisted.	Full Price.	TOTAL.
Ellerby .. ..	181	94	57	332
West Street ..	165	90	52	307
Burmantofts ..	184	125	64	373
Hunslet .. ..	129	70	114	313
University ..	236	93	74	403
Woodhouse ..	180	130	93	403
Holbeck .. ..	125	87	72	284
Armley .. ..	74	42	88	204
Chapeltown ..	154	82	135	371
St. Nicholas ..	175	94	66	335
Bramley .. ..	43	50	66	159
New Wortley ..	108	72	36	216
Middleton ..	191	77	21	289
West Hunslet ..	64	50	63	177
Crossgates ..	28	14	27	69
Burley .. ..	14	15	31	60
Halton .. ..	35	14	33	82
Kirkstall ..	8	3	2	13
External .. ..	70	45	4	119
Totals .. ..	2,164	1,247	1,098	4,509



## AMOUNT OF COWS' MILK DISTRIBUTED IN PINTS. (YEAR 1936).

WELCOME.	Free.	1d. per pint.	2d. and 2½d. per pint.	3d. and 3½d. per pint.	TOTAL.
Ellerby .. ..	3,430	1,839	2,582½	..	7,851½
West Street ..	1,535	553	462	..	2,550
Burmantofts ..	2,617	998	655½	..	4,270½
Hunslet .. ..	1,362½	1,488	792½	..	3,643
University ..	4,431½	3,396	1,665	..	9,492½
Woodhouse ..	4,344	2,628	2,728	..	9,700
Holbeck .. ..	2,304	1,875	2,071	..	6,250
Armley .. ..	551	15	..	..	566
Chapeltown ..	4,082	1,839½	919½	..	6,841
St. Nicholas ..	3,845	4,667	2,055	..	10,567
Bramley .. ..	2,322	946½	173	..	3,441½
New Wortley ..	3,183	1,046	1,691	..	5,920
Middleton ..	4,840	1,568½	749½	..	7,158
West Hunslet ..	2,498	877	978½	..	4,353½
Crossgates ..	1,423	766½	497½	..	2,687
Burley .. ..	56	..	..	..	56
Halton .. ..	743	182	48	..	973
Kirkstall ..	367	232½	..	..	599½
External .. ..	2,173½	1,524	539	..	4,236½
Totals .. ..	46,107½	26,441½	18,607½	..	91,156½

## NUMBER OF RECIPIENTS YEAR 1936

WELCOME.	Free	1d. per pint.	2d. and 2½d. per pint.	3d. and 3½d. per pint.	TOTAL.
Ellerby .. ..	28	19	22	..	69
West Street ..	20	7	7	..	34
Burmantofts ..	23	11	14	..	48
Hunslet .. ..	19	13	10	..	42
University ..	36	27	16	..	79
Woodhouse ..	38	27	34	..	99
Holbeck .. ..	26	16	26	..	68
Armley .. ..	5	1	..	..	6
Chapeltown ..	33	19	10	..	62
St. Nicholas ..	44	28	25	..	97
Bramley .. ..	11	9	2	..	22
New Wortley ..	30	14	21	..	65
Middleton ..	35	13	11	..	59
West Hunslet ..	22	13	10	..	45
Crossgates ..	11	8	6	..	25
Burley .. ..	1	..	..	..	1
Halton .. ..	4	2	1	..	7
Kirkstall ..	5	3	..	..	8
External .. ..	36	21	14	..	71
Totals .. ..	427	251	229	..	907

## WORK OF MILK STAFF.

	I. Quarter.	II. Quarter.	III. Quarter.	IV. Quarter.	Year.
Applications dealt with (new)	476	455	509	409	1,849
„ „ (repeat)	3,454	3,624	3,573	3,592	14,243
„ „ (refused)	..	..	..	..	..
No. of re-applications ..	127	149	195	192	663
*No. of external cases dealt with at the office ..	294	231	210	236	971
	4,351	4,459	4,487	4,429	17,726
No. of visits to Welcomes paid by the milk secretaries .. .. .	167	159	167	167	660

\* Persons under treatment at the Public Dispensary and the General Infirmary.

COST OF MILK DISTRIBUTION SCHEME FOR YEAR ENDED  
31ST DECEMBER, 1936.

Expenditure			INCOME.		
	£	s. d.		£	s. d.
By salaries and wages	650	14 7	To cash received for		
„ Cost of dried milk	3,329	9 2	sale of dried milk	2,346	7 0
„ Cost of cows' milk	1,167	19 0			
„ Printing, stationery, etc...	42	1 3			
„ Superannuation					
Contributions ..	32	18 7			
„ Sundries ..	16	10 2	„ balance—loss ..	2,893	5 9
	<u>£5,239</u>	<u>12 9</u>		<u>£5,239</u>	<u>12 9</u>

Nett cost per head to Corporation, £0 10s. 5½d.

During the year the amount of dried milk distributed in Leeds amounted to 25 tons, of which 10·1 tons were given free to 2,164 mothers and babies, and 12·4 tons were supplied at full or assisted rates to 2,345 mothers and babies. In 1935 the corresponding figures were 9·01 tons free to 2,170 mothers, and 11·52 tons supplied at full or assisted rates to 2,249 persons.

In addition, 2·4 tons were distributed at the Welcomes to cases in receipt of Public Assistance, as compared with 2·93 tons in 1935. The cost of the milk supplied to Public Assistance cases is defrayed by the Public Assistance Committee.

The amounts of fresh cows' milk distributed during the year were 5,763·4 gallons free to 427 babies, and 5,631 gallons at full or assisted rates to 480 babies; in 1935 the corresponding figures were 4,651 gallons free to 343 babies, and 3,727 gallons at full or assisted rates to 354 babies.

**Convalescent Treatment for Mothers and Babies and Toddlers.—**

As in previous years, the arrangement for the convalescence of mothers with their babies through the Leeds Convalescent Society was continued on behalf of the Maternity and Child Welfare Committee. Most of the mothers were sent to the Homes at Withernsea and Harrogate, others being sent to different seaside and country houses. The mothers all found the change and rest very beneficial.

Convalescence was arranged for 90 mothers and babies, and 23 mothers without babies. The average period of stay at the Convalescent Homes was 14·48 days. The nett cost to the Corporation of this provision was £436 8s. 6d., or an average of £1 17s. 4d. per case per week.

In addition, 159 children between 3 and 5 years were sent for convalescence to Meanwood Convalescent Home. The average stay of each child was 22·5 days, and the cost to the Corporation was £3 7s. 9d. per case. The total cost to the Corporation was £553 5s. 2d. of which £14 7s. 6d. was refunded by the parents.

**Infants' Hospital, Wyther.**—The Hospital continued to be a most useful part of the Maternity and Child Welfare Service. Details of the work of the hospital are given in the tables on pages 185 and 186. The cases admitted to the Hospital, as in previous years, consisted for the most part of children suffering from dietetic disorders, malnutrition, marasmus and rickets, with their various accompanying ailments. Several cases were referred from the Orthopædic Clinic, the General Infirmary, the Health Clinic, and the Public Dispensary.

The 50 cots which the Hospital provides were well occupied during the year.

The provision of a modern up-to-date Hospital to take the place of the adapted house in present use has been talked of for many years. It is to be hoped that some move in that direction will be made in the near future ; it is long overdue.

### ANALYSIS OF CASES TREATED DURING 1936.

Reason for admission.	Under one year.		Over one year.		Total.
	M.	F.	M.	F.	
Rickets .. .. .	1	3	15	8	27
Rickets and Bronchitis .. .. .	1	..	4	2	7
Rickets and Malnutrition .. .. .	1	..	7	6	14
Rickets with Deformity .. .. .	..	..	13	6	19
Malnutrition .. .. .	..	5	27	24	56
Malnutrition and Bronchitis .. .. .	2	1	4	7	14
Malnutrition and Otorrhoea .. .. .	..	..	3	2	5
Malnutrition (Dietetic) .. .. .	3	3	..	..	6
Marasmus .. .. .	14	4	2	..	20
Marasmus and Broncho-pneumonia .. .. .	1	..	..	..	1
Enlarged Cervical Glands .. .. .	..	..	..	1	1
Congenital Heart Disease .. .. .	..	1	..	..	1
Prematurity and Oedema .. .. .	1	..	..	..	1
Prematurity .. .. .	1	..	..	..	1
Broncho-pneumonia .. .. .	..	..	1	3	4
Spinal Kyphosis .. .. .	1	..	2	..	3
Tuberculous Dactylitis .. .. .	..	..	..	1	1
Tuberculosis .. .. .	..	2	1	1	4
Tuberculosis and Infantile Eczema .. .. .	..	..	..	1	1
Coeliac Disease .. .. .	..	..	..	1	1
Pyloric Spasm .. .. .	..	1	..	..	1
Enteritis—marasmus .. .. .	1	3	1	..	5
Little's Disease .. .. .	..	..	1	..	1
Congenital Syphilis .. .. .	1	..	..	..	1
Spastic Paralysis .. .. .	..	..	..	1	1
Green Stick Fracture .. .. .	..	1	..	..	1
Problem Child .. .. .	..	..	1	..	1
Infantile Paralysis .. .. .	..	..	1	..	1
Corneal Ulceration .. .. .	..	..	..	1	1
<b>TOTAL .. .. .</b>	<b>28</b>	<b>24</b>	<b>83</b>	<b>65</b>	<b>200</b>

## SUMMARY OF CASES TREATED IN THE INFANTS' HOSPITAL, WYTHER.

	Males.	Females.	Total.
Remaining in Hospital, January 1st, 1936 .. ..	30	16	46
Admitted during the year ..	81	73	154
Discharged during the year ..	85	67	152
Died during the year .. ..	5	2	7
Remaining in Hospital, December 31st, 1936 .. ..	21	20	41

Mortality rate per cent. on admission 4'5.      Average stay in Hospital 81 days.

## CLASSIFICATION OF ADMISSIONS ACCORDING TO AGE AND SEX.

Males.		Females.		Total Infants.		Grand Total.
Under 1 year.	Over 1 year.	Under 1 year.	Over 1 year.	Under 1 year.	Over 1 year.	
19	62	21	52	40	114	154

**Day Nursery.**—The new and more satisfactory premises at Blenheim Lodge are being used to full capacity.

The number of children admitted for the first time during the year was 46 as compared with 95 for the previous year. The total attendances are given in the accompanying table.

**Residential Nursery.**—There were 29 children in residence on January 1st, 1936, 195 cases were admitted during the year, 189 were discharged and 35 remained in residence on December 31st, 1936. Seventeen of the children were illegitimate. The reasons for other admissions were as follows : in 96 cases mothers expecting confinement ; in 70 cases illness of mothers ; in 27 cases mothers going for convalescence ; in 7 cases deaths of mothers ; in 3 cases mothers deserted ; in 2 cases mothers at work ; in 1 case illness of relative ; and in one case father in prison.

I should like once more to express my own appreciation and that of the Maternity and Child Welfare Committee, of the work of the Executive Committee of the Day and Residential Nurseries, whose services given ungrudgingly have been of great value.

TOTAL ATTENDANCES OF CHILDREN AT THE RESIDENTIAL AND DAY  
NURSERIES, IN AGE GROUPS, FOR THE YEAR ENDED 31ST DECEMBER,  
1936.

Nursery.	Whole day attendances.				Half day attendances.			
	Under 3 years.	3-5 years.	Over 5 years.	Total.	Under 3 years.	3-5 years.	Over 5 years.	Total.
Spring Bank Residential Nursery ..	12,576	99	..	12,675	..	..	..	..
Blenheim Lodge Day Nursery	7,787	2,072	..	9,859	500	237	..	737

**Health Week, October 4th to 10th.**—The educational work of the Maternity and Child Welfare Department goes on continuously during the year, but during Health Week additional special efforts are made.

In 1936, the propaganda was all done in the Infant Welfare Centres.

Three films (1) " Outposts of Health " dealing with dental care, (2) " Bottled Health " dealing with the advantage of drinking milk, (3) " Founded on Fact " the production of clean milk, etc., were shown at ten Welcomes. The projector and operator were kindly lent by the Gas Department. This Department also co-operated by supplying a gas stove and cooking demonstrator, who attended for three sessions at one Welcome and demonstrated the cooking of various meals.

All the doctors at the Clinics gave short talks, their subjects dealing chiefly with diet, milk, teeth and ante-natal care. With the doctors, the health visitors and voluntary workers arranged little demonstrations and exhibitions. These dealt for the most part with milk, diets, posters with toddlers diets, sample toddlers' diets for the day cooked, simple cooked meals for the family, preparation of babies feed, different grading of milks, the keeping of fluid milk, clothing exhibitions, fresh air and sunlight exhibition, first aid in the home, improvised cots, a specimen lying-in room, and a model living room, anti-dummies and so on.





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# Inspection and Supervision of Food.

**INCLUDING REPORTS OF THE  
CHIEF VETERINARY OFFICER**

MR. J. A. DIXON, M.R.C.V.S.,

on

- (i.) Meat Inspection.
- (ii.) Diseases of Animals Acts.
- (iii.) Milk and Dairies ;

also Reports on the Administration of

- (i.) The Food and Drugs Acts and Regulations.
- (ii.) The Fertilisers and Feeding Stuffs Act, 1926.
- (iii.) The Pharmacy and Poisons Act, 1933, Part II ;

and the

**REPORT OF THE CITY ANALYST,**

MR. C. H. MANLEY, M.A., F.I.C.,

on The Municipal Laboratory.

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## MEAT INSPECTION

BY

J. A. DIXON, M.R.C.V.S., *Chief Veterinary Officer.*

**Slaughter Houses.**—The number of slaughter-houses on the register at the end of the year remained unchanged.

### SLAUGHTERHOUSES IN USE.

	Number in use on December 31st.					
	1920	1932	1933	1934	1935	1936
Public Abattoir .. ..	1	1	1	1	1	1
Private slaughter-houses (registered) .. ..	63	42	41	39	36	36
Private slaughter-houses (licensed) .. ..	8	9	9	9	8	8
Knackers' Yards .. ..	2	1	1	1	1	1

The inspectors paid a total of 6,163 visits to the 44 private slaughter-houses, an average of 140 visits, or approximately 2·7 visits per week, to each slaughter-house.

### ANIMALS SLAUGHTERED IN THE PUBLIC ABATTOIR AND IN PRIVATE SLAUGHTERHOUSES.

	Year.	Cattle.	Calves.	Sheep.	Pigs.	Total.
Public Abattoir ..	1934	26,243	16,273	84,231	8,228	134,975
	1935	29,288	20,893	79,435	11,984	141,600
	1936	30,714	25,576	81,135	11,859	149,284
Private Slaughter- Houses ..	1934	12,833	10,764	60,055	41,177	124,829
	1935	13,067	12,559	60,355	50,413	136,394
	1936	13,655	16,199	60,144	52,663	142,661

The number of animals slaughtered in the city in both the Public Abattoir and private slaughter-houses continues to increase. The Public Abattoir and several of the private slaughter-houses are used to their utmost capacity, and although the most recent extension to the Public Abattoir will relieve some of the congestion, that establishment will remain overcrowded on most days of the week. A very urgent need is the provision of greater facilities for the slaughter and dressing of pigs. The existing pig slaughter-house is used to its full capacity and it would be an advantage if it could be enlarged or additional accommodation found. The Health Committee might then be in a stronger position to terminate the use of some of the existing private pig slaughter-houses.

TABLE SHOWING SEPARATELY FOR CATTLE, CALVES, SHEEP AND PIGS THE NUMBER OF CONDEMNATIONS (1) OF ENTIRE CARCASSES (2) OF PARTS OF CARCASSES OR ORGANS (a) FOR TUBERCULOSIS, AND (b) FOR DISEASES OTHER THAN TUBERCULOSIS.

	No. of animals slaughtered.	Extent of Condemnation.	Tuberculosis.	Other diseases.
Cattle	44,369	Carcases and organs .. ..	215	155
		Carcases .. ..	..	8
		Part carcasses .. ..	391	40
		Beef heads and tongues .. ..	976	99
		Full beef offals .. ..	544	21
		Beef livers .. ..	536	1,078
		Beef hearts .. ..	54	18
		Beef skirts .. ..	102	10
		Beef kidneys .. ..	160	219
		Beef lungs .. ..	1,292	147
		Beef spleens .. ..	32	7
		Beef udders .. ..	..	29
Calves	41,775	Carcases and organs .. ..	9	114
		Part carcasses .. ..	..	2
		Carcases .. ..	..	10
		Plucks .. ..	..	1
Sheep	141,279	Carcases and organs .. ..	1	154
		Carcases .. ..	..	12
		Part Carcasses .. ..	..	7
		Plucks .. ..	..	223
		Kidneys .. ..	..	2
Pigs	64,522	Carcases and organs .. ..	43	136
		Carcases .. ..	..	6
		Part Carcasses .. ..	2	12
		Pigs' heads .. ..	1,041	2
		Pigs' plucks .. ..	1,193	886
		Sets of Offals .. ..	..	161

**Meat and other foods inspection.** —At the Public Abattoir and Kirkgate Market, meat inspection is carried on by the Assistant Veterinary Officer and two lay inspectors, and all animals are examined ante-mortem and post-mortem. The private slaughter-houses, shops and vehicles used for the sale of meat, are inspected by two other lay inspectors, and so far as can be known every animal at private slaughter-houses is examined both ante-mortem and post-mortem.

The table appended indicates the numbers of animals killed and the extent to which disease was found on post-mortem examination.

**Meat and other foods condemned as unsound.**—The appended table indicates the amounts of diseased and unsound meat and other foods condemned and disposed of during the year.

MEAT, ETC., DESTROYED BY CONSENT.

	1936.	1935.	1934.	1933.
Beef .. ..	226,459 lbs.	217,021 lbs.	197,440 lbs.	157,182 lbs.
Veal .. ..	5,946 "	6,965 "	6,609 "	6,014 "
Mutton .. ..	10,787 "	9,189 "	12,344 "	11,350 "
Bacon and Ham .. ..	..	40 "	23 "	495 "
Pork .. ..	41,071 "	41,314 "	33,736 "	34,413 "
Offals .. ..	101,784 "	89,287 "	120,891 "	137,688 "
Rabbits .. ..	11,624 "	7,446 "	14,188 "	10,859 "
Poultry .. ..	7,521 "	785 "	354 "	655 "
Game .. ..	174 "	73 "	483 "	880 "
Cheese .. ..	280 "	18,127 "	5,742 "	60 "
Fish .. ..	35,957 "	37,895 "	33,569 "	69,805 "
Shellfish .. ..	11,770 "	29,065 "	33,257 "	21,179 "
Fruit .. ..	9,455 "	6,627 "	12,384 "	12,272 "
Vegetables .. ..	124,633 "	44,861 "	109,123 "	87,180 "
Edible fungi .. ..	40 "	205 "	458 "	2,307 "
Inedible fungi .. ..	..	..	..	39 "
Yeast .. ..	..	..	..	..
Tinned Goods .. ..	2,864 lbs	2,761 lbs.	3,569 lbs.	13,330 lbs.
Sundries .. ..	..	5,043 "	434 "	199 "
TOTALS .. ..	590,365 lbs.	516,704 lbs.	584,604 lbs.	565,907 lbs.
No. of Eggs .. ..	468	304	5,906	600

The following cases were taken into court under the Public Health Act, 1875 :—

No.	Section.	Result of Hearing.	Remarks.
1	117	Fined £10 and ordered to pay costs	Butcher.
2	117	Fined £2 and ordered to pay costs	Shopkeeper.

**Slaughter of Animals Act, 1933.**—During the year, 34 licences to slaughter or stun animals were granted by the City Council, all of which will expire on January 1st, 1939. The 497 licences granted to slaughtermen during 1934 expired on January 1st, 1937, and 379 applications for the renewal of expiring licences were received up to the end of the year. In 377 cases the City Council approved renewal, but in the remaining 2 cases it was resolved not to renew the licences. No applications for renewal were received in respect of a number of the expiring licences. This is explained by the fact that certain licencees have either ceased to slaughter or have removed to new addresses without notifying the Department. Nevertheless, every endeavour is made to trace all holders of these expiring licences.

During the year legal proceedings were instituted against a slaughterman for slaughtering an animal without previously stunning it with a mechanically-operated instrument, and against the slaughterman's employer for aiding and abetting in the commission of the offence. Both defendants were found guilty, the slaughterman being fined £2 and his employer £5.

**Shell-fish.**—The condition of all shell-fish coming into the city for sale continues to receive special attention. Oysters are received from Whitstable, Colchester, Cornwall, King's Lynn, Carlingford (Ireland), and Yeasake (Holland); and mussels from Lindisfarne (Northumberland), Warren Point, Boston, King's Lynn, Galway, Lytham St. Anne's and Conway.

Samples of mussels from the main sources of supply were submitted for bacteriological examination and found to be satisfactory but samples of mussels from Mornington (Drogheda) and



Omeath (Co. Louth) respectively, were reported to be unsatisfactory. The wholesale fishmonger to whom the mussels were forwarded was advised by letter that the mussels were not considered fit for human consumption and he undertook not to receive mussels from these two sources.

**Public Health (Meat) Regulations, 1924.**—The following is a summary of the cases taken into court under the Regulations during the year.

No.	Article.	Result of Hearing.	Remarks.
1	9	Fined £10 and ordered to pay costs	Butcher.
2	21	Fined £2.. .. .	Employee.
3	21	Fined £2.. .. .	Do.
4	21 (b)	Fined £2 and ordered to pay costs..	Butcher.
5	21 (b)	Fined £2 and ordered to pay costs..	Employee.
6	21	Fined £2.. .. .	Butcher.
7	20	Fined £3.. .. .	Do.
8	20	Fined £2.. .. .	Do.
9	20(5)(a)	Fined £2.. .. .	Do.

**Food-preparing places.**—The following table gives a summary of the work done under Section 44 of the Leeds Corporation Act, 1930 :—

Number of premises on the register .. ..	208
Applications submitted for registration ..	9
Applications approved :—	
(a) Pork butchers .. .. .	4
(b) Beef butchers .. .. .	4
(c) Potted meat makers .. .. .	1
	9
Applications disapproved .. .. .	..
Number of visits to :—	
(a) Food preparing places .. .. .	379
(b) Restaurants .. .. .	54
	433

**DISEASES OF ANIMALS ACTS.**

BY

J. A. DIXON, M.R.C.V.S., *Chief Inspector and Veterinary Inspector.*

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**Tuberculosis Order of 1925.**—Bovine tuberculosis maintains an important place among the contagious animal diseases in this country. As in other parts of the country, there would appear to be no appreciable decrease in the incidence of this disease and although the Tuberculosis Order removes the obvious cases it does very little to reduce the general incidence. The Attested Herds Scheme administered by the Ministry of Agriculture and Fisheries is a real step in that direction. Unfortunately there is only one farm in the city which maintains its dairy herd by breeding from existing tuberculosis-free stock, and as all other dairy herds in the city are recruited by purchase from other farms it can never be anticipated that such farms can become so free from tuberculosis as to qualify as attested herds. During the year, 73 reports of suspected tuberculosis were received, of which 45 came from owners as compared with 55 the previous year. Of the remaining 28 cases, 3 were reported by the owners' veterinary advisers and 25 were discovered by the Veterinary Officers of the Department during their routine quarterly inspections. It will be observed that whilst cowkeepers continue to report freely, reliance must still be placed upon regular, routine veterinary inspection.

The total number of animals examined was 2,152. Of the animals examined, 66 were affected with the disease as defined by the Order, 46 of which had a chronic cough and shewed definite clinical signs of tuberculosis, while 14 were affected with tuberculosis of the udder and 6 with tuberculous emaciation. All the 66 animals were slaughtered and examined post mortem, when it was found that in 50 cases the animals were affected with "advanced" tuberculosis, while in the remaining 16 the disease was not "advanced."

ANNUAL RETURN OF THE WORKING OF THE TUBERCULOSIS ORDER  
OF 1925, FOR THE YEAR ENDING DECEMBER 31ST, 1936.  
ESTIMATED BOVINE POPULATION .. 2,839.

TOTAL NUMBER OF ANIMALS REPORTED .. .. .	73
(a) By Owner .. .. .	45
(b) By Veterinary Advisor to owner .. .. .	3
(c) By Veterinary Officer acting under the :—	
1. Milk and Dairies Order, 1926 .. .. .	7
2. Milk (Special Designations) Orders, 1923 and 1936 .. .. .	13
3. Tuberculosis Order of 1925 .. .. .	5
ANIMALS EXAMINED .. .. .	2,152
(a) Cows in milk .. .. .	1,668
(b) Other Cows or Heifers .. .. .	456
(c) Other Bovine animals.. .. .	28
ANIMALS TESTED WITH TUBERCULIN .. .. .	..
ANIMALS FOUND DISEASED .. .. .	66
(a) Having Tuberculosis of the Udder .. .. .	14
(b) Giving Tuberculous Milk and showing lesions of Tuberculosis .. .. .	..
(c) Suffering from Tuberculous Emaciation .. .. .	6
(d) Affected, but not as in a, b, or c .. .. .	46

**Swine Fever Order of 1908.**—During the year there were received 24 reports of suspected swine fever, all of which were investigated by the Veterinary Officers of the Ministry of Agriculture and Fisheries. In three cases the diagnosis was confirmed as compared with 10 in the previous year.

No proceedings were taken during the year for infringements of the Order.

**Regulation of Movement of Swine Order of 1922.**—The administration of this Order has necessitated the issuing of 1,097 licences for the dispersal of 11,500 pigs from the Whitkirk Auction Mart, while 1,370 visits were paid to pig-keeping premises to ascertain whether the recently-removed store pigs were detained and isolated for the appropriate period.

During the year a pig-keeper, and a live-stock carrier acting on his behalf, were proceeded against for the removal of a pig from the Whitkirk Auction Mart without a licence for such a movement being first obtained. Both defendants were convicted.

**Parasitic Mange Orders of 1911 and 1918.**—No case of suspected parasitic mange was reported during the year.

**Exportation and Transit of Horses, Asses and Mules Order of 1911.**—No horses, asses or mules were despatched from the city for slaughter at British ports during the year.

**Anthrax Order of 1928.**—During the year 6 cases of suspected anthrax were reported, but microscopical examination of blood from the suspected carcasses showed a negative result in each case. On post mortem examination it was found that all six animals died from causes other than anthrax.

**Sheep Scab Order of 1928.**—No case of sheep scab occurred in the city during the year.

Several consignments of contact sheep were received for immediate slaughter in the city and the skins were immersed in an approved sheep dip in accordance with the Order.

**Foot-and-Mouth Disease Order of 1928.**—No case of this disease occurred in the city during the year, and the city was not affected by the various Orders made by the Minister of Agriculture and Fisheries in connection with outbreaks of foot-and-mouth disease in other parts of the country.

**Animals (Landing from Ireland, Channel Islands and Isle of Man) Order of 1933.**—The administration of the Order has entailed the issuing of 274 licences for the removal from the Victoria Cattle Market of 608 cattle and 5,694 sheep recently landed from Ireland. In addition to these, 293 movement licences were issued for the movement of 2,211 cattle and 13,165 sheep recently landed from Ireland but dispersed without passing through the Victoria Cattle Market.

Irish store cattle to the number of 147 were received at premises in the city, and these were all duly inspected on arrival and further visits paid to see that they were isolated and detained for the prescribed period of six clear days following their arrival, in accordance with the Order.

No proceedings were necessary under the Order during the year.

**Importation of Canadian Cattle Order of 1933.**—No Canadian cattle were received in the city during the year.

**Improvement of Livestock (Licensing of Bulls) Act, 1931.**—During the year the Ministry of Agriculture and Fisheries requested that action be taken against two farmers within the city for the keeping of unlicensed bulls, and in each case the defendant was convicted and fined.

**Transit of Animals (Amendment) Order of 1931.**—This Order has, on the whole, been satisfactorily observed by the persons engaged in the transportation of live-stock by road.

**General.**—The following Orders were issued by the Minister of Agriculture and Fisheries during the year :—

Regulation of Movement of Swine (Amendment) Order of 1936.  
Diseases of Animals (Importation of Therapeutic Substances)  
Order of 1936.

Fowl Pest Order of 1936.

Poultry Markets and Receptacles (Disinfection) Order of 1936.

Poultry and Hatching Eggs (Importation) Order of 1936.

Foot-and-Mouth Disease (Infected Areas) (Temporary Modification of Restrictions) Order of 1936.

Foot-and-Mouth Disease (Infected Areas) (Temporary Modification of Restrictions) Order of 1936 (No. 2).

**Veterinary Attendance on Corporation Horses.**—The Veterinary Officers continue to act as veterinary advisers to all Departments of the Corporation and to attend to all animals in their possession. There has been no serious outbreak among any class of animals, and beyond the ordinary sickness and injuries incidental to animals there is nothing particular to report.

## MILK AND DAIRIES.

BY

J. A. Dixon, M.R.C.V.S., *Chief Veterinary Officer.*

**Town Produced Milk.**—As compared with the previous year, the year under review shows a reduction of 3 in the number of dairy farms within the city, from 166 to 163, and a corresponding reduction in the average number of milk cows kept at these farms

from 2,893 to 2,806. So long as the building of houses on the fringe of the city continues without a compensating extension of the city boundaries, it must be anticipated that dairy farms will continue to disappear and the amount of home produced milk diminish accordingly.

The Veterinary Inspectors and the Dairies and Cowsheds Inspector continue to pay regular routine visits to all production dairies, every herd being examined by the Veterinary Inspectors at least once in each quarter, whilst the Dairies and Cowsheds Inspector pays more frequent visits including visits at the morning milking time to ensure that the conditions under which milk is produced are satisfactory and in accordance with the Milk and Dairies Order. At routine inspections the Veterinary Officers found 51 cows affected with disease, 8 having tuberculosis of the udder, 11 tuberculosis in other forms, and 32 diseases other than tuberculosis. In all cases the animals were dealt with in accordance with the provisions of the Milk and Dairies (Consolidation) Act, 1915 and the Tuberculosis Order of 1925. No case of contagious abortion was found.

**Country Milk.**—As previously mentioned, country produced milk becomes increasingly important each year and it is noticeable that there is a considerable expansion in the amount of country produced milk received at the wholesale dairies in the city. By visits to the wholesale dairies and railway stations at times when milk is arriving, every effort is made to supervise the condition of the milk and the methods by which it is transported, by observation, the application of filtration tests, and the taking of samples for bacteriological and biological tests.

The retail dairies are supervised by the Sampling Officers under the Food and Drugs (Adulteration) Act, who as Officers of the Food and Dairies Section of the Public Health Department are closely allied with the Veterinary Officers and the Dairies and Cowsheds Inspector.

The following is a summary of the cases taken into court in respect of offences against the Milk and Dairies (Consolidation) Act, 1915, including contraventions of the provisions of the Milk and Dairies Order, 1926, during the year :—



No.	Section or Article.	Result of Hearing.			Remarks.
1	Section 6	Discharged	under	Probation of	Retail
		Offenders' Act	on payment of 4/-	costs	purveyor.
2	Do.	Do.	do.	do.	Do.
3	Article 6	Do.	do.	do.	Do.
4	Do.	Do.	do.	do.	Do.
5	Do.	Do.	do.	do.	Do.

**Graded Milk and Issue of Licences.**—During the year, the Milk (Special Designations) Order, 1923 was replaced by the Milk (Special Designations) Order, 1936, and thereby the special designations which may be used in relation to milk are changed to "Tuberculin Tested," "Accredited," and "Pasteurised," special provision being made whereby Tuberculin Tested milk which is bottled at the place of production may be described as "Tuberculin Tested (Certified)," while Tuberculin Tested milk which is subsequently pasteurised must be described as "Tuberculin Tested (Pasteurised)." It is considered that, whilst the tuberculin testing of dairy cows is a protection to the consumer against the risk of contracting bovine tuberculosis, the subsequent pasteurisation of the milk may be desirable as a protection against the possibility of other diseases arising from both the cow and from human sources.

There was a considerable increase during the year in the demand for licences for the production of Tuberculin Tested milk, prompted to some extent no doubt by a desire to evade the Milk Marketing Board, which up to the present has left licensed producers of "Tuberculin Tested" milk free to dispose of their milk direct to the distributor thus avoiding the levies imposed by the Board.

Hitherto the City Council has encouraged farmers to produce a higher grade of milk by permitting the Veterinary Officers to carry out the tuberculin testing of dairy cows as a free service until the herd was considered to be established and thereafter at a small charge sufficient to cover the cost of the tuberculin and the Officers' travelling, but the increased demand for tuberculin testing has necessitated a review of the practice and now applicants for licences are required to have the tuberculin testing of their cattle carried

out at their own expense by private veterinary surgeons approved by the City Council in accordance with the Order. The Corporation's Veterinary Officers still carry out the clinical inspection of dairy cows as a free service to the producers, and one of the Veterinary Officers attends at every tuberculin testing by the private veterinary surgeon and confers with him as to the decision on each animal tested. There is also reserved to the Veterinary Officers the right of carrying out independent check tests, though up to the present the need for such tests has not arisen.

The number of licensed producers of Tuberculin Tested milk has risen from 3 to 8, and the approximate number of cows from 100 to 250, though only a portion of the milk so produced is sold as Tuberculin Tested milk, the remainder being disposed of to the large wholesale dairies. Some of it is pasteurised and sold as such.

The number of licensed producers of "Accredited" milk increased from 70 to 73, with approximately 1,794 cows. At these dairies the Corporation's Veterinary Officers continue with the quarterly clinical inspection of the cows as a free service. Samples of milk were collected from all licensed producers once each quarter and of the 292 routine samples examined, 267 were found to be satisfactory. Where the samples were unsatisfactory appropriate action was taken and further samples examined until the milk conformed to the bacteriological standard laid down in the Order. In no case was it necessary to call the producer before the Committee with a view to the suspension or revocation of his licence.

The sale of Pasteurised milk continues to expand although no additional licences were issued during the year. The licensed pasteurising establishments are supervised by the Sampling Officers and the Dairies Inspector who pay regular and frequent visits to all such establishments and scrutinise the charts made by the recording thermometers as well as examine the general cleanliness and management of the establishments. The milk from each licensed pasteurising establishment is sampled each week. Some of these samples are submitted to the Phosphatase Test in addition to being examined bacteriologically and in no case was there reason to complain of bacterial impurity. In 2 cases only did the samples fail to pass the Phosphatase Test thus showing that the pasteurisation had been inefficient.

LICENCES ISSUED UNDER THE MILK (SPECIAL DESIGNATIONS)  
ORDER, 1923, DURING THE YEAR, AND SHOWING COMPARISON  
WITH OTHER YEARS.

Description of Licences.	Number in force on 31st May.				
	1932.	1933.	1934.	1935.	1936.
(1) Producers' Licences to use the designation "Grade A" ..	8	8	8	70	76
(2) Dealers' Licences to use the designation "Certified" ..	20	22	22	55	60
(3) Dealers' Licences to use the designation "Grade A (Tuberculin Tested) " :—					
(a) Bottling establishments ..	2	2	2	2	2
(b) Shops .. .. .	7	7	50	64	79
(4) Dealers' Licences to use the designation "Grade A " :—					
(a) Bottling establishments ..	3	3	3	3	2
(b) Shops .. .. .	196	202	152	100	70
(5) Dealers' Licences to use the designation "Pasteurised " :—					
(a) Pasteurising establishments	4	4	5	6	5
(b) Shops .. .. .	..	..	..	22	32

LICENCES ISSUED UNDER THE MILK (SPECIAL DESIGNATIONS)  
ORDER, 1936.

Description of Licences.	Number in force on 31st December 1936.
To use the designation "Tuberculin Tested"—	
1. To produce and bottle .. .. .	1
2. To produce, but not bottle .. .. .	3
3. To sell by retail .. .. .	6
To use the designation "Accredited"—	
1. To produce and bottle .. .. .	..
2. To produce, but not bottle .. .. .	7
3. To sell by retail .. .. .	1
To use the designation "Pasteurised"—	
1. Pasteurisers' Licences .. .. .	..
2. To sell by retail .. .. .	1

**Dairy Farms, Milk Shops and Milk Sellers.**—The following tables show the number of registered dairy farms, milkshops and milk sellers in the city on December 31st, 1936.

#### DAIRY FARMS.

Number of dairy farms on the register on December 31st,	
1935 .. .. .	166
Number added to the register during the year ..	—
Number removed from the register during the year ..	3
Number on register on December 31st, 1936 .. ..	163

#### COWKEEPERS.

Number of cowkeepers on the register on December 31st,	
1935 .. .. .	155
Number added to the register during the year ..	—
Number removed from the register during the year ..	3
Number on the register on December 31st, 1936 .. ..	152

#### MILKSHOPS.

Number of milkshops on the register on December 31st,	
1935. (The total of 528 includes the premises of	
41 retail purveyors of milk in the surrounding	
County area who are registered to sell milk within the	
area of the Leeds City Council) .. .. .	528
Number added during the year (including three in the	
surrounding County area) .. .. .	16
Number removed from the register during the year ..	21
Number on the register on December 31st, 1936 (including	
the premises of 44 retail purveyors of milk in the	
surrounding County area) .. .. .	523

#### RETAIL PURVEYORS OF MILK.

Number of retail purveyors of milk on the register on	
December 31st, 1935. (The total of 541 includes	
41 retail purveyors of milk with premises in the	
surrounding County area who are registered to sell	
milk within the area of the Leeds City Council) ..	541
Number added during the year (including three retail	
purveyors of milk in the surrounding County area) ..	18

Number removed from the register during the year ..	19
Number on the register on December 31st, 1936 (including 44 retail purveyors of milk in the surrounding County area) .. .. .	540

The following visits were paid during the year by the Food and Drugs Inspectors, and Cowsheds and Dairies Inspectors in connection with the Milk and Dairies Acts and Orders:—

	VISITS.
To milkshops .. .. .	1,230
To cowsheds .. .. .	1,710
To railway stations.. .. .	543
To farms or milkshops <i>re</i> infectious disease .. .. .	10
To food shops and bottled milk stores .. .. .	374

**Biological Tests.**—During the year, 148 samples were submitted to the City Bacteriologist for biological investigation for the presence of tubercle bacilli. Of these, 7 were special samples either from individual cows encountered in the administration of the Tuberculosis Order, or control samples, and all were found to be free from tubercle bacilli. Of the remaining 141 which may be considered routine samples, 5 (3.55 per cent.) were found to be tuberculous. Two of these samples were of ungraded milk produced in the County area. In one case there was a history of a tuberculous cow having been removed from the herd after the sample had been taken, but in the other the source of the infection was not discovered. Two other positive cases were from "Grade A" and "Accredited" herds respectively in the County area. In each case the County Veterinary Department reported that tuberculous cows had been removed from the herds after the samples had been taken. The remaining case was very disturbing inasmuch as the milk was from a large herd within the city in respect of which a licence for the production of "Tuberculin Tested" milk had recently been granted. The sample was obtained on December 16th, while all the animals in the herd had passed the tuberculin test in the previous September and July. A special clinical inspection failed to reveal any cow which could be suspected of tuberculosis and the herd was divided into suitable groups from each of which a control sample was obtained, and subsequently the City Bacteriologist reported that all such control samples were free from tubercle bacilli.

The accompanying table gives details :—

BIOLOGICAL TESTS.

Ordinary Samples.	No.	Positive.	Negative.
" Certified " milk .. .. .	9	..	9
" Grade A (Tuberculin Tested) " milk .. .. .	2	..	2
" Tuberculin Tested " milk .. .. .	16	1	15
" Grade A " milk .. .. .	8	1	7
" Accredited " milk .. .. .	16	1	15
" Pasteurised " milk .. .. .	11	..	11
Ungraded milk .. .. .	79	2	77
Total .. .. .	141	5	136

Samples taken under the Tuberculosis Order, of 1925.			
	No.	Positive.	Negative.
Control Samples—			
" Grade A " milk .. .. .	7	..	7

**Public Health (Prevention of Tuberculosis) Regulations, 1925.—**

It was not found necessary to take action under these Regulations during the year.

**Leeds Corporation Act, 1930.—Ice Cream.**—The following table shows a summary of the work done during the year.

Number of premises registered for the manufacture and sale of ice cream .. .. .	15
Number of premises registered for the sale of ice cream .. .. .	32
Number of premises where registration was refused .. .. .	2
Number of premises removed from the register ..	18
„ „ visits paid to premises .. .. .	2,385
„ „ visits paid to fairgrounds .. .. .	4
„ „ contraventions found on premises ..	27
„ „ contraventions removed .. .. .	27
„ „ persons found manufacturing ice cream on unregistered premises ..	2
„ „ samples taken for bacteriological examination in Departmental laboratory .. .. .	18



**Departmental Laboratory.**—During the year 1,087 samples of milk were submitted to the Departmental Laboratory for bacteriological examination. Of this number 766 were of graded milk (260 being pasteurised), 57 were taken at the schools, 91 were taken in course of delivery to local institutions, 68 were taken at the railway stations, and 91 were taken from road vehicles used for the conveyance of milk. Fourteen samples of milk, not included in the table on page 208, brought to the laboratory by farmers, dairymen and others, were also examined.

The samples for bacteriological examination were kept at room temperature until the souring point was reached. The average keeping quality of the samples was as follows :—

Graded raw milk	..	..	..	3·3 days.
Pasteurised milk	..	..	..	3·2 days.
School milk	..	..	..	3·1 days.
Institution milk	..	..	..	2·9 days.
Road borne milk	..	..	..	3·0 days.
Station milk	..	..	..	2·2 days.

Of the total samples 45—of which 8 were “ Tuberculin Tested ” milk—failed to comply with the standards laid down in the Milk (Special Designations) Orders, 1923 and 1936; 2 samples of “ Tuberculin Tested ” and 4 of “ Grade A ” and 31 of “ Accredited ” milk were from farms within the city; 6 samples of “ Tuberculin Tested ” and 2 of “ Accredited ” were from farms outside the city. In each case appropriate action was taken to prevent recurrence of the offence.

*Ice Cream.*—Samples of ice cream from local vendors to the number of 18 were also submitted for bacteriological examination; the results are shown in the table on page 208.

*Milk Samples tested by the Gerber Method.*—During the year 27 samples of milk were tested in the Departmental laboratory by the Gerber method, the results being as follows :—

Total.	Genuine.	Deficient in fat only.	Deficient in Solids-not-fat only.	Deficient in fat and Solids-not-fat.
* 27	18	5	3	1

\* These were all informal samples.

The average composition of the 27 samples was :—

Fat	..	..	..	..	..	3·7 per cent.
Solids-not-fat	..	..	..	..	..	8·7 per cent.
						<hr/>
Total solids	..	..	..	..	..	12·4 per cent.
						<hr/>

*Special Milk Tests.—Phosphatase.*—This is a test newly introduced for the detection of milk which has been unsatisfactorily pasteurised or which contains some proportion of raw milk. It is regarded as important that whenever the special designation “Pasteurised” is applied to milk such milk shall have been efficiently pasteurised, as this is the only guarantee to the public that in exchange for certain nutritive properties of the milk which are destroyed during pasteurisation, the consumer can be assured that all tubercle bacilli and other organisms which may have been present in the raw milk have been destroyed or rendered innocuous. During the year 46 samples of milk were submitted to this test and 44 gave a satisfactory result. In the remaining two cases the result was unsatisfactory indicating that pasteurisation had not been complete. The dairymen concerned were warned and since then have exercised greater care in carrying out the process.

*Reductase.*—Another test introduced during the year, was the Methylene Blue Reduction Test, commonly called the Reductase Test. This test is prescribed by the Milk (Special Designations) Order, 1936, as a substitute for the former bacteriological test for graded raw milk and operated from January 1st, 1937. The laboratory has been equipped with the necessary apparatus for carrying out the test, and the laboratory staff have made themselves familiar with the technique which is simple enough if somewhat time-consuming and demands close and constant attention. Though the bacterial count has disappeared it is still necessary to apply the test for the presence of *B. Coli*. The new test has meant an increase in the number of milk samples to be examined and that in turn has caused considerable congestion in the laboratory emphasising once more the need for more and better accommodation. Any further increase in the work will make the position quite impossible. As to the test itself I am not at all convinced that it is the best available or even that it is as good as the old bacteriological test. It has its advantages

## SAMPLES EXAMINED AS TO BACTERIAL CONTENT.

Bacterial Content per c.c.	Graded Raw Milk.	Past-eurised Milk.	School Milk.	Institution Milk.	Road borne Milk.	Station Milk.	Ice Cream.	Total.
1-50,000 } 92.3%	467 96.2%	250 96.2%	57 100.0%	83 91.2%	79 86.8%	53 77.9%	12 66.7%	1,001
50,000— 100,000 } 4.0%	20 4.0%	6 2.3%	..	4 4.4%	4 4.4%	8 11.8%	4 22.2%	46
100,000— 200,000 } 2.4%	12 2.4%	1 0.4%	..	4 4.4%	3 3.3%	3 4.4%	1 5.6%	24
200,000— 500,000 } 1.0%	5 1.0%	1 0.4%	..	..	4 4.4%	3 4.4%	1 5.6%	14
500,000— 1,000,000 } 0.2%	1 0.2%	..	..	..	..	..	..	1
1,000,000+ } 0.2%	1 0.2%	2 0.8%	..	..	1 1.1%	1 1.5%	..	5
Total Samples	506	260	57	91	91	68	18	1,091

## SAMPLES EXAMINED AS TO B. COLI CONTENT.

Degree of Contamination.	Graded Raw Milk.	Past-eurised Milk.	School Milk.	Institu- tion Milk.	Road borne Milk.	Station Milk.	Ice Cream.	Total
B. Coli present in 1/10 c.c. }	..	31 11.9%	9 15.8%	10 11.0%	21 23.1%	15 22.1%	4 22.2%	90
„ 1/100 c.c. }	46 9.1%	8 3.1%	6 10.5%	2 2.2%	4 4.4%	3 4.4%	1 5.6%	70
„ 1/1000 c.c. }	..	22 8.5%	5 8.8%	18 19.8%	21 23.1%	21 30.9%	2 11.1%	89
B. Coli absent {	460 90.9%	199 76.5%	37 64.9%	61 67.0%	45 49.5%	29 42.6%	11 61.1%	842
Total Samples	506	260	57	91	91	68	18	1,091

but it has also its defects, one of which is its uncertainty and another its lack of differential value. It tells when the milk is inferior as regards purity but does not indicate to what that inferiority is due so that one is unable to indicate to the farmer just where his methods are at fault.

*Miscellaneous.*—Samples of water from farms and other premises, 7 in all, were examined for the presence of bacillus coli with the following results :—

Containing bacillus coli in 1 c.c.	..	..	3
Free from bacillus coli in 1 c.c.	..	..	4

The following investigations were also undertaken :—

Milk for the presence of tubercle or other bacilli	..	..	..	..	..	22
Sputum for the presence of tubercle or other bacilli	..	..	..	..	..	1
Horse liver for the presence of tubercle or other bacilli	..	..	..	..	..	1

Other work :—

Feathers (used for bedding) examined for the presence of bacillus coli	..	..	..	3
Rinsings from milk churns examined as to sterility	..	..	..	1
Microscopical slides prepared and examined..	64			
Tubes of media prepared	..	..	..	5,638

## PHARMACY AND POISONS ACT, 1933. PART II.

The provisions of Part II. of the above-mentioned Act and the Poisons Rules made thereunder came into operation on the 1st May, 1936. Prior to the introduction of this Act, the work under the previous Acts relating to the sale of Poisons was carried out by the Watch Committee, but the scope of previous Acts was limited and seven premises only came within their purview.

The new Act, by bringing within the List of Part II. Poisons, substances which hitherto had been sold without restriction by general shopkeepers, considerably increased in number the premises which are required to be kept under supervision. The administration of the Act was delegated to the Health Committee and an Inspector was appointed to carry out duties under the Act.

All shopkeepers who wished to continue the sale of substances which are now included in the List of Part II. Poisons, such as ammonia, sodium hydroxide and various common disinfectants had to apply to have their names entered in the List of Persons entitled to sell Part II. Poisons which the local authority is required to keep in pursuance of Section 21 of the Act. This accounts for the very considerable increase in the number of listed sellers as compared with the number registered under the Poisons and Pharmacy Act, 1908.

The following table gives a detailed summary of the work done under the Act :—

Number of Persons on the List on 31st December, 1936 .. .. .	310
Number of Premises on the List on 31st December, 1936 .. .. .	521
Number of Premises in respect of which listing was refused .. .. .	1
Number of Listed Sellers removed from the List	3
Number of Premises removed from the List ..	3
Number of visits paid to :—	
1. Listed premises .. .. .	558
2. Unlisted premises .. .. .	1,320
3. Unlisted premises where Part II. Poisons sold	65*
CONTRAVENTIONS.	
1. Sale of Part II. Poisons by hawkers ..	1
2. Improper storage of 1st Schedule poisons and use of Poisons book not in prescribed form ..	1
3. Use of Poisons book not in prescribed form	1
Number of transfers from premises originally listed to new approved premises .. .. .	1
Alteration in relation to deputy entitled to sell Part II. Poisons specified in 1st Schedule to Poisons Rules .. .. .	1

\* Of this number, 9 premises were subsequently placed on the List, in 55 cases the sale of Poisons has ceased on the premises, and in 1 case no application has yet been received from the occupier of the premises.

**FOOD AND DRUGS.**  
**FERTILISERS AND FEEDING STUFFS.**

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**Food and Drugs.**—The Sampling Officers took 278 formal and 33 informal samples of food other than milk and cream. The total number of formal samples of all kinds taken during the year was 2,077 and of informal samples 141. For the results of the analyses of these samples see the City Analyst's report on page 212.

**Fertilisers and Feeding Stuffs Act, 1926.**—During the year 27 samples, 1 formal and 26 informal in character, were taken under the above-mentioned Act and submitted to the Agricultural Analyst for examination. Of this number 7 were samples of fertilisers and 20 of feeding stuffs.

One sample of fertiliser failed to conform to warranty. The deficiency was caused by storage under unsatisfactory conditions, there being no attempt to defraud on the part of the manufacturers.

There were no requests received during the year from farmers for samples to be taken under the Act.

For the results of the analyses of these samples see the City Analyst's report on page 212.



## MUNICIPAL LABORATORY.

BY

C. H. MANLEY, M.A., F.I.C., *City Analyst.*

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This is the ninth annual report issued since the inauguration of a Municipal Laboratory in Leeds under the direction of a whole-time Analyst. The total number of samples analysed in 1936 was 4,203, of which, 2,218 were food and drugs, and 27 were fertilisers and feeding stuffs.

Analyses have been made during the year for eight Corporation Departments, viz., Town Clerk's, Public Health, (including St. James's Hospital), Waterworks, City Police, City Engineer's, Highways, Supplies, and Cleansing, as well as for the General Infirmary, H.M. Prison and the West Riding of Yorkshire Smoke Abatement Committee.

The following is a summary of the analyses made during 1936 :—

Samples submitted by inspectors under the Food and Drugs (Adulteration) Act 1928	.. ..	2,218
Samples submitted by inspectors under the Fertilisers and Feeding Stuffs Act 1926	..	27
Samples submitted by inspectors under the Rag Flock Acts 1911-28	.. .. .	8
Special samples analysed for the Public Health Department	.. .. .	15
Samples analysed for the Waterworks Department		22
"    "    "    Town Clerk's Department		2
"    "    "    City Police	.. ..	8
"    "    "    City Engineer's Department		2
"    "    "    Cleansing Department	..	1
"    "    "    Supplies Department	..	11
"    "    "    Highways Department	..	1
"    "    "    St. James's Hospital	..	18
"    "    "    General Infirmary	..	1
"    "    "    Governor H.M. Prison	..	2

## Samples analysed for the West Riding Regional Smoke

## Abatement Committee :—

	(1) Dust plates	..	11
	(2) Rain gauges	..	59
	(3) Light tests	..	1,770
	(4) Sulphur dioxide tests		24
Private samples	..	..	3
TOTAL	..	..	4,203

### FOODS AND DRUGS.

The table on pages 222 and 223 summarises the samples taken under the Food and Drugs (Adulteration) Act, 1928, along with the number and percentage of adulterations. The percentage of samples found to be adulterated was 7·7, compared with 6·5 for 1935, and 5·5 for England and Wales for that year. Of samples other than milk 2·9 per cent. were adulterated, as compared with 3·9 per cent. for the previous year.

**Milk.**—Of 1,868 samples 160 (8·6 per cent.) failed either to conform to the Sale of Milk Regulations, 1901, or were otherwise unsatisfactory. This compares favourably with the 1935 figure of 7·2 per cent. the lowest annual figure so far recorded here.

The quarterly figures for the past year were :—

	Quarter 1936.				Year.	
	1st.	2nd.	3rd.	4th.	1936.	1935.
Total adulteration figure ..	9·1%	13·8%	7·3%	3·7%	8·6%	7·2%
Watered samples	4·6%	2·1%	1·2%	2·2%	2·6%	1·9%

Of the 160 samples adulterated, 41 contained added water, 112 were deficient in fat, and 7 showed both added water and fat deficiency. The greatest amount of added water was 22·1 per cent. and the greatest fat deficiency 58·0 per cent. (informal) and 55·0 per cent. (formal).

The proportion of samples containing added water (48) was 2.6 per cent. as against 1.9 per cent. in 1935.

Similarly, the proportion of samples showing fat deficiency alone (112) was 6.0 per cent. as against 5.3 per cent. in 1935.

It is noteworthy that in cases Nos. 304, 306 and 307L, proceedings were successfully instituted against the producers under Section 2 of the Food and Drugs (Adulteration) Act, 1928, for selling milk not of the nature, substance and quality demanded, even though the samples in question conformed to the Sale of Milk Regulations, 1901. Determination of the freezing points showed that both these samples and the retailer's sample (No. 290L), bought the previous day, contained added water, the retailer's sample in addition containing less than the 8.5 per cent. regulation minimum of non-fatty solids.

The relevant figures were as follows :—

		290		304		306		307L
Non-fatty solids	.. ..	8.15%	..	8.58%	..	8.61%	..	8.75%
Added water	.. ..	7.7%	..	4.3%	..	3.0%	..	3.2%

Two appeal-to-cow samples contained 8.89 and 9.04 per cent. non-fatty solids respectively, and possessed normal freezing points. The retailer was discharged on production of warranty.

The average composition of all milk samples taken in 1936 was as follows (the 1934 and 1935 figures being given for comparison) :—

		1934.		1935.		1936.
Non-fatty solids	.. ..	8.82%	..	8.86%	..	8.81%
Fat	.. ..	3.64%	..	3.73%	..	3.72%
Total solids	..	12.46%	..	12.59%	..	12.53%

**Skimmed Milk.**—The 13 samples taken conformed to the requirements of the Sale of Milk Regulations, 1912, the average composition being :—

Non-fatty solids	.. ..	9.17%
Fat	.. ..	0.12%
Total solids	..	9.29%

**Cream.**—All the 16 samples examined were of satisfactory composition and free from preservative, the average figure for the fat content being 53.4 per cent. (maximum 58.2 per cent., minimum 50.0 per cent.).

**Butter.**—The 14 samples examined were all genuine and free from preservative. The average water content was 14.4 per cent. the maximum permitted being 16.0 per cent.

**Margarine.**—The 11 samples examined were also satisfactory, the average water content being 14.9 per cent.

**Condensed and Dried Milks.**—The 5 samples of condensed and 8 samples of dried milk analysed were all of satisfactory composition, conforming to the 1923/27 regulations as regards their fat contents.

**Cheese.**—The 1 sample submitted (full cream Cheddar) contained 29.4 per cent. butter fat, equivalent to 46.0 per cent. in the moisture free substance.

**Cream Cheese.**—Of the 3 samples submitted, one (informal) was a whole milk cheese and the two others (formal), were partly skimmed milk cheeses. They were all very moist, and possessed low fat contents, the latter being 15.1, 10.5 and 10.9 per cent. respectively, corresponding to 44.0, 28.6 and 37.6 per cent. respectively in the moisture free substance.

A genuine cream cheese usually contains about 60 per cent. butter fat, equivalent to about 90.0 per cent. in the moisture free substance.

**Lard.**—Of 18 samples, one (5.6 per cent.) was an imitation vegetable product (No. 273 C). The vendor received a warning letter.

**Potted Beef.**—Of 7 samples, 2 (28.6 per cent.) were adulterated. No. 1 C, bought on January 2nd contained 48.0 per cent. and No. 2 C, bought on January 3rd, contained 49.0 per cent. of starchy filler, the percentages of dry starch in each case being 4.6. It is contended that such products should be sold as "Potted beef pastes." The wholesale vendor of No. 1 C (official sample taken in course of delivery to retailer concerned in sample No. 1143 C (1935)), was prosecuted on February 12th, 1936, and found guilty, but dismissed under the Probation of Offenders' Act on payment of 14/6 costs.

No proceedings were instituted in the case of No.2 C as the wholesaler had intimated at the time of sale that the preparation was meat paste.

**Rum.**—Of 8 samples, one (12.5 per cent.) was 40.6° under proof, this being equivalent to 8.6 per cent. excess of water (No. 860 C). The sample in question was an official one bought at a public house on September 29th. Proceedings were instituted, and at the case heard on November 18th, the barman and licensed occupier were found guilty, but discharged under the Probation of Offenders' Act on payment of 14/6 costs.

**Shredded Suet.**—Of 5 samples one (20.0 per cent.) contained only 79.4 per cent. beef fat instead of the 83.0 per cent. minimum of the Society of Public Analysts, the deficit being caused by excess of rice flour, which totalled 20.6 per cent. No legal action was taken.

**Vinegar.**—Of 16 samples two (12.5 per cent.) contained less than the Local Government Board, 1911, standard of 4.0 per cent. acetic acid.

The vendor and manufacturer of No. 257 L, containing 3.5 per cent. acetic acid (12.5 per cent. of excess water), received warning letters from the Medical Officer of Health.

No action was taken in the case of No. 665 C, containing 3.9 per cent. acetic acid (2.5 per cent. excess water).

## FERTILISERS AND FEEDING STUFFS.

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**Fertilisers.**—One formal and 6 informal samples were submitted. Of these one informal sample labelled " Nitrate of Soda " contained only 20.0 per cent. of this salt, the remainder consisting of 76.0 per cent. sulphate of ammonia with 4 per cent. moisture and other impurities.

**Feeding Stuffs.**—Of the 20 informal samples submitted one sample of cooked flaked maize contained only 2.3 per cent. oil as against 3.0 per cent. declared (23.3 per cent. deficiency).

## OTHER ANALYSES.

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**Rag Flocks.**—All the samples submitted (8) were satisfactory, this being the sixth year in succession that this has been so.

The average chlorine content was 20 parts per 100,000 (maximum allowed—30 parts per 100,000).

**Public Health Department. (Special Enquiries) (15).**—Two farm waters were tested in connection with certain samples of watered milks.

Three drinking waters supplied to certain cottages on the outskirts of the city were analysed and pronounced unfit for consumption.

One beef extract, and 2 farm milks were favourably reported upon, and determinations made of the chlorine contents of one cotton flock and 6 samples of feathers.

**Town Clerk's Department.**—Two samples of water supplying a Yorkshire Institution were analysed.

**Waterworks Committee (22).**—In addition to the 12 monthly analyses of the city water, 5 other water analyses were made, as well as 3 slaked lime assays, and examinations of one sample of soil and one deposit on an iron pipe.

**Watch Committee (8).**—(1) A sample of vomit, submitted in connection with a case of suspected poisoning by arsenic, was examined for this poison with negative results.

(2) *Rex. v. Hodgson.* In connection with a charge of vitriol throwing, in which the accused was found guilty, identification of the liquid used (sulphuric acid), and determination of its strength (96.0 per cent.) were carried out.

(3) The nature of two stains was ascertained.

(4) *Rex. v. Ratcliffe.* The iodine contents of a bottle of Tincture of Iodine and of a box of chocolates were ascertained in connection with a charge of attempting to cause a person to take a noxious thing with intent to annoy. The prisoner concerned was acquitted.



(5) Arson charge (Rex. v. Kelly). Determination was made of the flash point of a sample of creosote alleged to have been used for accelerating the burning of the contents of a house. Prisoner was acquitted.

(6) One sample of Orange and Quinine wine, sold without a wine and spirit licence, was analysed.

Expert evidence was given in cases of (2), (4) and (6).

**Supplies Committee (11).**—Analyses were made of 3 soaps, one scouring powder, one metal polish, 2 turpentines, 2 turpentine substitutes, one drinking water, and one Portland cement.

The first turpentine substitute failed signally to conform to specification, and following the analytical report upon it, deliveries were returned to the contractors for replacement by a consignment which proved satisfactory.

In connection with the Portland cement analysis, the store at the Highways Department, Kirkstall Road, was visited, following complaints made by the workmen about the alleged effects of a certain brand of cement upon the eyes, nose and throat. Analysis had shown that the cement in question conformed to specification. Examination of several bags on delivery failed to confirm statements that a gas was given off from the warm cement, but certain suggestions were made respecting the adoption of possible precautionary measures in its future handling by men more susceptible than others to the physical effects of the dust.

**Highways Committee.**—One sample of Portland cement was examined, this examination being made earlier in the year than that carried out for the Supplies Committee, but in connection with a similar complaint.

**Cleansing Committee.**—One roof deposit was analysed.

**St. James's Hospital. (18).**—One set of 4 organs was examined for arsenic, and a second set of 5 organs for narcotics, the results in each case being negative. In connection with the case of suspected narcotic poisoning expert evidence was given at the City Coroner's Court.

Examinations were also made for the presence of lead in 6 urines, one set of fæces, and one cerebro-spinal fluid. In addition one set of pills was analysed.

**General Infirmary.**—One drinking water was analysed.

**The Governor, H.M. Prison, Armley.**—Two margarines were analysed.

**Regional Smoke Abatement Committee.**—The monthly analyses of the rain water and soot collected at the five stations in the city have been continued. The monthly and yearly amounts of total solids (dissolved and undissolved) expressed as tons per square mile are tabulated on page 258.

**Dust Plates.**—The results of the second series of exposures, using soft paraffin wax instead of prepared lard, and made during the six months October 9th, 1935—April 9th, 1936 are furnished herewith in tabular form.

*Total amount of Dust.*—A study of table 1 reveals the fact that, owing to the widely different conditions under which the plates have been exposed, any general comparison between the quantities found in different areas would give a quite false impression. Thus, as an illustration, from the Leeds deposits, we know from the rain-gauge deposits that Hunslet usually gives figures about treble those at Headingley, yet the dust collected on the plate at Goodman Street, Hunslet, is only about one fifth of the amount collected at Spring Bank, Headingley. Similarly, of the two plates exposed at Market Buildings, Leeds, one has collected three and a half times as much dust as the other owing to differences in the manner of exposure.

Fortunately three plates (one plate in each town) were exposed under similar conditions, namely, in the open air, but protected from rain, and these may be compared one with another, although the areas in which they were exposed were of different types. The Leeds area was in the centre of the town and the Halifax and Huddersfield areas were residential. The figures for these three plates are given below :—

Station.	Cwts. per sq. mile.			
	Total dust.	Arsenic oxide.	Lead.	Copper.
Leeds—				
Market Roof ..	3,320·0	1·580	10·050	1·384
Halifax—				
Northowram ..	516·0	0·234	6·150	0·353
Huddersfield—				
Ravensknowle ..	972·0	0·292	1·198	0·730

As one would expect, the Leeds plate collected the largest amount of dust and of arsenic, lead and copper; the Huddersfield plate collected nearly twice as much dust as that at Halifax but contained only about the same amount of arsenic, one fifth the amount of lead and twice as much copper,

TABLE I.

Station.	Total Dust.		Arsenic Oxide.		Lead.		Copper.	
	a.	b.	a.	b.	a.	b.	a.	b.
LEEDS.								
*No. 1—Centre (Market Buildings) ..	1,700.0	933.0	0.582	0.320	5.190	2.850	0.970	0.533
No. 2—Residential (Spring Bank) ..	526.0	289.0	0.216	0.119	0.563	0.309	0.216	0.119
No. 3—Industrial (Goodman St.) ..	112.0	61.5	0.043	0.024	0.193	0.106	..	..
No. 4—Residential (Knostrop) ..	1,160.0	637.0	0.304	0.167	0.990	0.544	1.270	0.697
No. 5—Centre (Market) ..	6,050.0	3,320.0	2.880	1.580	18.300	10.050	2.520	1.384
HALIFAX.								
No. 1—Centre (over Clock Chamber) ..	5,930.0	3,255.0	1.422	0.780	14.690	8.000	1.900	1.044
No. 2—Industrial (Public Library) ..	2,070.0	1,136.0	0.634	0.348	25.500	14.000	5.620	3.085
No. 3—Residential (Northowram Hall) ..	942.0	516.0	0.427	0.234	11.200	6.150	0.642	0.353
HUDDERSFIELD—								
†No. 1—Industrial (Disused Mill Room) ..	160.0	87.8	0.013	0.007	0.086	0.047	..	..
No. 2—Centre (Market Hall Clock Tower) ..	3,180.0	1,745.0	1.810	0.994	4.350	2.390	14.800	8.130
No. 3—Residential (Ravensknowle) ..	1,770.0	972.0	0.532	0.292	2.180	1.198	1.330	0.730

TABLE II.

	Arsenic Oxide.		Lead.		Copper.	
	%	ppm.	%	ppm.	%	ppm.
LEEDS.						
*No. 1 .. ..	0.034	342	0.306	3,055	0.057	570
No. 2 .. ..	0.041	410	0.107	1,070	0.041	410
No. 3 .. ..	0.038	384	0.172	1,725	..	..
No. 4 .. ..	0.026	262	0.085	854	0.109	1,095
No. 5 .. ..	0.047	476	0.302	3,025	0.041	416
HALIFAX.						
No. 1 .. ..	0.024	240	0.248	2,480	0.032	321
No. 2 .. ..	0.031	307	1.234	12,340	0.272	2,720
No. 3 .. ..	0.045	453	1.188	11,880	0.068	682
HUDDERSFIELD.						
†No. 1 .. ..	0.008	80	0.053	534	..	..
No. 2 .. ..	0.057	570	0.137	1,370	0.465	4,650
No. 3 .. ..	0.030	300	0.123	1,230	0.075	752

a = milligrams per sq. foot.

b = Cwts. per sq. mile.

\* Tampered with—apparently not seriously.

† Removed and placed vertically in a window.

*Proportions of Arsenic, Lead and Copper.*—Table II. is much more useful for purposes of comparison because the proportions of the metals given is independent of the amount of dust collected and therefore all the plates can be compared one with another.

Arsenic is found in greatest proportion in the centres of Leeds and Huddersfield and in the residential area of Halifax, Huddersfield having the greatest percentage and Leeds and Halifax being about equal. Lead is found in greatest proportion in No. 2 (industrial) and No. 3 (residential) at Halifax, the percentages being far greater than on any other plate and so high that they call for some explanation. In Leeds and Huddersfield the centre of the town contains the highest percentage of lead, Leeds containing more than Huddersfield. Copper is also found in an unusually high percentage in the central area, Huddersfield. Halifax had the next largest percentage, in an industrial area, and Leeds has the third largest percentage in No. 4 area, which is near a copper works.

The figures in Table II. are of similar order to those obtained from the six Leeds dry dusts examined in 1932.

*Light Tests.*—The figures in the table on page 259 provide a measure of the average amount of daily sunlight per month expressed in terms of iodine liberated from an acidified solution of potassium iodide exposed in a 1 oz. glass bottle on a white plate for 24 hours.

*Atmospheric Sulphur Dioxide.*—The results of the third full year's tests carried out with the lead peroxide cylinders exposed in Park Square and Headingley are recorded on page 256 and expressed in milligrams of sulphur trioxide absorbed by 100 sq. cms. of fabric per day.

In conclusion I wish to express to my Assistant and Deputy, Mr. A. Houlbrooke, M.Sc., F.I.C., and other members of the staff my sincere appreciation of their services and co-operation in the work of the Department during the year.

FOOD AND DRUGS (ADULTERATION) ACT, 1928. SAMPLES SUBMITTED  
TO THE CITY ANALYST DURING 1936.

Article.	No. examined.			No. adulterated.			Percentage adulteration.
	Formal	Informal	Total	Formal	Informal	Total	
Almond oil .. ..	I	..	I	..	..	..	..
Almonds (Ground) ..	3	..	3	..	..	..	..
Do. do. (Substitute)	I	I	2	..	..	..	..
Arrowroot .. ..	2	..	2	..	..	..	..
Aspirin tablets .. ..	I	..	I	..	..	..	..
Baking powder .. ..	18	..	18	..	..	..	..
Beef dripping .. ..	I	..	I	..	..	..	..
*Beer .. ..	26	..	26	..	..	..	..
*Biscuits .. ..	..	I	I	..	..	..	..
Black beer .. ..	7	..	7	..	..	..	..
Blackcurrant and Glycerine Sweets ..	..	I	I	..	..	..	..
*Butter .. ..	14	..	14	..	..	..	..
Castor oil .. ..	I	..	I	..	..	..	..
Cocoa .. ..	7	..	7	..	..	..	..
Cod Liver oil .. ..	I	..	I	..	..	..	..
Coffee .. ..	5	..	5	..	..	..	..
Coffee (French) .. ..	4	..	4	..	..	..	..
Coffee and Chicory extract .. ..	I	..	I	..	..	..	..
Condensed milk .. ..	3	2	5	..	..	..	..
Cornflour .. ..	I	..	I	..	..	..	..
*Cream .. ..	16	..	16	..	..	..	..
Cheese .. ..	I	..	I	..	..	..	..
Cream cheese .. ..	2	I	3	2	I	3	100.0
*Custard powder .. ..	2	..	2	..	..	..	..
Dried Milk .. ..	..	8	8	..	..	..	..
Epsom salts .. ..	3	..	3	..	..	..	..
French beans .. ..	..	2	2	..	..	..	..
Ginger wine .. ..	I	..	I	..	..	..	..
Glycerine .. ..	I	..	I	..	..	..	..
Gravy salt .. ..	I	..	I	..	..	..	..
Gregory powder .. ..	..	I	I	..	..	..	..
Honey .. ..	I	..	I	..	..	..	..
*Jam .. ..	..	II	II	..	..	..	..
*Jelly .. ..	4	..	4	..	..	..	..
Lard .. ..	18	..	18	I	..	I	5.6
*Margarine .. ..	II	..	II	..	..	..	..
*Milk .. ..	1,760	108	1,868	152	8	160	8.6
*Milk (Skimmed) .. ..	13	..	13	..	..	..	..
Carried forward ..	1,931	136	2,067	155	9	164	..

\* Tested for preservative.

FOOD AND DRUGS (ADULTERATION) ACT, 1928. SAMPLES SUBMITTED  
TO THE CITY ANALYST DURING 1936—Continued.

Article.	No. examined.			No. adulterated.			Per-centage adultera-tion.
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	1,931	136	2,067	155	9	164	..
Milk bread .. ..	3	..	3	..	..	..	..
Mint .. ..	1	..	1	..	..	..	..
*Mince meat .. ..	2	..	2	..	..	..	..
Oatmeal .. ..	..	1	1	..	..	..	..
Olive oil .. ..	2	..	2	..	..	..	..
Parsley .. ..	2	..	2	..	..	..	..
*Pearl barley .. ..	9	..	9	..	..	..	..
Peas .. ..	3	..	3	..	..	..	..
Pepper .. ..	7	..	7	..	..	..	..
*Peppermint cordial ..	1	..	1	..	..	..	..
*Polony .. ..	1	..	1	..	..	..	..
*Potted beef .. ..	7	..	7	2	..	2	28·6
Rice .. ..	8	..	8	..	..	..	..
Rum .. ..	7	1	8	1	..	1	12·5
*Sausages .. ..	21	..	21	..	..	..	..
Shredded suet .. ..	5	..	5	1	..	1	20·0
Spices :—							
Allspice .. ..	1	..	1	..	..	..	..
Caraway seeds .. ..	1	..	1	..	..	..	..
Cinnamon .. ..	1	..	1	..	..	..	..
Ground cloves .. ..	1	..	1	..	..	..	..
Ground ginger .. ..	3	..	3	..	..	..	..
Ground mace .. ..	1	..	1	..	..	..	..
Ground nutmeg .. ..	1	..	1	..	..	..	..
Mixed spice .. ..	1	..	1	..	..	..	..
Sugar .. ..	3	..	3	..	..	..	..
*Sultanas .. ..	1	..	1	..	..	..	..
Strawberry cocktails ..	1	..	1	..	..	..	..
Sweet Nitre balsam .. ..	1	..	1	..	..	..	..
Sweet Spirit of Nitre ..	1	..	1	..	..	..	..
Sweet Nitre substitute ..	1	..	1	..	..	..	..
Tea .. ..	19	..	19	..	..	..	..
*Temperance beverages ..	1	..	1	..	..	..	..
*Vinegar .. ..	16	..	16	2	..	2	12·5
*Vinegar (Malt) .. ..	8	..	8	..	..	..	..
Vermouth (Italian) .. ..	2	..	2	..	..	..	..
Whisky .. ..	6	..	6	..	..	..	..
Total .. ..	2,080	138	2,218	161	9	170	7·7

\* Tested for preservative.



SUMMONSES ISSUED DURING 1936 UNDER THE FOOD AND DRUGS  
(ADULTERATION) ACT, 1928.

No. of Sample	Article.	Adulteration or Deficiency.	Fines. £ s. d.			Remarks.
1C	Potted Beef	Contains 48.0% of a starchy filler consisting of 4.6% of starch and 43.4% of water.	..			Discharged under the Probation of Offenders' Act on payment of 14/6 costs; wholesaler.
70C	} Milk	20.0% deficient in fat and 20.8% of added water	..			Both defendants discharged under the Probation of Offenders' Act on payment of 15/6 costs; producers.  do.  do.
71C		21.0% deficient in fat and 19.6% of added water				
72C		5.3% of added water	..	..		
28L		17.0% deficient in fat	..	..		
119C	} Milk	8.7% added water	..	..		Owing to the prolonged indisposition of the defendant (a retailer) the hearing of this case has been adjourned <i>sine die</i> .
133C		20.2% of added water	..	..		Discharged under the Probation of Offenders' Act on payment of 21/- costs; producer.
134C		8.5% of added water	..	..		do.
143C		19.1% of added water	..	..		do.
144C	} Milk	14.5% of added water	..	..		do.
130C		8.1% of added water	..	4	0 0	Both defendants ordered to pay 10/6 costs; producer-retailers.
186C	Milk	19.0% deficient in fat	..	0	9 6	Defendant ordered to pay 10/6 costs and defendant's employee ordered to pay 4/- costs on a charge of aiding and abetting in the commission of the offence; retailer and employee.

SUMMONSES ISSUED DURING 1936 UNDER THE FOOD AND DRUGS  
(ADULTERATION) ACT, 1928—Continued.

No. of Sample	Article.	Adulteration or Deficiency.	Fines.			Remarks.
			£	s.	d.	
202L	Milk	5.1% of added water .. ..				Discharged under the Probation of Offenders' Act on payment of £2/8/6 costs; producer.
203L	Milk..	16.0% deficient in fat .. ..				Case dismissed.
204L	Milk	25.0% deficient in fat .. ..				do.
205L	Milk	12.0% deficient in fat .. ..				do.
206L	Milk	17.0% deficient in fat .. ..				do.
207L	Milk	15.0% deficient in fat .. ..				do.
280C	Milk	17.9% of added water .. ..	2	0	0	Ordered to pay 10/6 costs; producer.
284C	Milk	20.4% of added water .. ..	2	0	0	Ordered to pay £3/5/- costs; producer.
285C	Milk	7.7% of added water .. ..	2	0	0	Costs included in 284C above.
306C	Milk	3.8% of added water .. ..				Ordered to pay £3/5/- costs; producer.
307C	Milk	4.2% of added water .. ..				
308C	Milk	4.5% of added water .. ..				Ordered to pay £2/16/- costs; producer.
310C	Milk	7.2% of added water .. ..				Discharged under the Probation of Offenders' Act on payment of 10/6 costs; producer.
311C	Milk	6.6% of added water .. ..				do.
290L	Milk	7.7% of added water .. ..				Case dismissed on plea of warranty from pro- ducer; retailers.
304L	Milk	4.3% of added water .. ..				Discharged under the Probation of Offenders' Act on payment of £3/17/- costs; pro- ducers.
306L	Milk	3.0% of added water .. ..				
307L	Milk	3.2% of added water .. ..				
405L	Milk	4.0% of added water .. ..				Discharged under the Probation of Offenders' Act on payment of 14/6 costs; retailer.

SUMMONSES ISSUED DURING 1936 UNDER THE FOOD AND DRUGS  
(ADULTERATION) ACT, 1928—Continued.

No. of Sample	Article.	Adulteration or Deficiency.	Fines.			Remarks.
			£	s.	d.	
413L	Milk	38.0% deficient in fat ..	1	0	0	Ordered to pay 14/6 costs; retailer.
464C	Milk	6.0% of added water ..	..	..	..	Discharged under the Probation of Offenders' Act on payment of 14/6 costs; retailer.
471C	Milk	3.2% of added water ..	10	0	0	
472C	Milk	9.6% of added water and 8.0% deficient in fat ..	10	0	0	
473C	Milk	4.2% of added water ..	10	0	0	Ordered to pay £2/12/- costs; producer.
560C	Milk	7.0% of added water and 6.7% deficient in fat	2	0	0	
511L	Milk	16.0 deficient in fat ..	..	..	..	Discharged under the Probation of Offenders' Act on payment of 14/6 costs; retailer.
602L	Milk	3.2% of added water ..	..	..	..	Defendant ordered to pay £1/1/- costs and his wife ordered to pay £1/1/- costs on charge of aiding and abetting.
613L	Milk	6.4% of added water ..	..	..	..	Discharged under the Probation of Offenders' Act on payment of £1/5/- costs; retailer.
623L	Milk	9.1% of added water ..	..	..	..	
690L	Milk	18.0% deficient in fat ..	..	..	..	Discharged under the Probation of Offenders' Act on payment of £1/5/- costs; retailer.
822C	Milk	6.8% of added water ..	0	10	0	Ordered to pay £1/11/- costs; retailer.

SUMMONSES ISSUED DURING 1936 UNDER THE FOOD AND DRUGS  
(ADULTERATION) ACT, 1928—Continued.

No. of Sample	Article	Adulteration or Deficiency	Fines			Remarks
			£	s	d	
860C	Rum	40.6 degrees under proof caused by the addition of 8.6% excess water	..	..	..	Licensee and barman each discharged under the Probation of Offenders' Act on payment of 14/6 costs; licensee and barman.
789L	Milk	8.3% of added water	..	..	..	Discharged under the Probation of Offenders' Act on payment of 14/6 costs; retailer.
794L		1.9% of added water	..	..	..	
974C	Milk	16.4% of added water	..	..	..	Case dismissed with costs of £1 against the Corporation on successful plea of warranty; retailer.
982C		18.3% of added water	..	5	0 0	
984C	Milk	5.7% of added water	..	5	0 0	Ordered to pay 15/9 costs; wholesaler-retailers.
993C	Milk	20.0% of added water	..	..	..	Discharged under the Probation of Offenders' Act on payment of £4/19/- costs; producer.
1107C		22.1% of added water	..	..	..	
1122C	Milk	40.0% deficient in fat	..	1	0 0	Ordered to pay £3/3/- costs; producer.
1128C	Milk	9.6% of added water	..	..	..	Discharged under the Probation of Offenders' Act on payment of £1/14/6 costs; producer.
1163C	Milk	55.0% deficient in fat	..	1	0 0	Ordered to pay £2/19/6 costs; producer.
1165C		27.0% deficient in fat	..	1	0 0	



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## Sanitary Circumstances.

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## SANITARY CIRCUMSTANCES.

BY

ERNEST STANDISH, M.R.San.I., *Chief Sanitary Inspector.*

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**Rivers and Streams.**—Close co-operation continued to be maintained between the Health Department and the West Riding Rivers Board, which administers the powers conferred by the Rivers Pollution Prevention Act, 1876, in respect of the Leeds area. During the year the abatement of pollution was secured on four occasions.

**Water.**—Mr. H. Shortreed, the Waterworks Manager, has kindly furnished me with the following particulars regarding the water supply of the city during 1936.

The year 1936 was one in which precipitation was again above the average, the rainfall being 39·29 inches as compared with an average of 33·37 inches for the past 60 years.

The smallest quantity of water in the reservoirs during the year was on the 23rd October, when they held a supply equal to 116 days.

During the year 41,112 yards of new distribution mains, 3 inches to 9 inches in diameter, were laid.

The total daily consumption for the year ended 31st December, 1936, was 17·94 million gallons, as compared with 18·34 million gallons in the previous year (exclusive of Compensation Water), the domestic consumption in the city and the area of direct supply being 23·53 gallons per head per day, including waste.

The monthly analyses (chemical and bacteriological) indicate a high standard of purity.

In this connection it is interesting to note that during the year 13 houses unprovided with a proper water supply were supplied with town's water.

**Sewage Disposal.**—I have to thank Mr. E. H. Howatson, the Sewerage Engineer, for the following information.

The Thorpe Stapleton Sewage Disposal Works continue to function efficiently and the degree of purification obtained in the treatment of the sewage of the city is generally satisfactory.

During the year under review the sludge storage tanks have been finished. This marks the completion of the first instalment of the sewage disposal scheme, and the plant is now functioning as a whole unit and according to plan.

No further extensions have been carried out at the Rodley Sewage Works. These works continue to maintain their efficiency and a satisfactory degree of purification is attained.

**Drainage and Sewerage.**—Four hundred and thirty-six yards of additional branch sewers were constructed during the year. This enabled two privies to be converted, 7 cesspools to be abolished and the drainage of one house to be connected to the sewer. Thanks are due to officials of the City Engineer's Department for their willing co-operation and courteous consideration of all requests made to them.

**Closet Accommodation.**—The position with regard to the various types of sanitary conveniences in the city at the end of the year was as follows: privies 198; pail-closets 159; trough-closets 270; and cistern water-closets approximately 141,175. There were also 353 cesspools. This figure was 346 last year, and the slight increase is explained by the fact that although 7 cesspools were abolished during the year 14 new cesspools were constructed.

Ten privies and twenty pail-closets were replaced by modern water-closets during the year.

The existing privies and pail-closets are mostly in rural districts where no sewer is at present available. The conversion into water-closets of the 30 conveniences mentioned was the result of town planning schemes making the necessary sewers available in the areas concerned.

**Public Cleansing.**—I am indebted to Mr. S. Thornley, the Director of Public Cleansing, for the following information. Household refuse, collected by the Cleansing Department during

TABLE SHEWING NUMBERS OF TROUGH CLOSETS, PRIVIES AND PAIL CLOSETS IN THE CITY DURING THE LAST THIRTY-TWO YEARS.

Year.	Trough Closets.	Privies.	Pail Closets.
1905	10,507	1,669	231
1906	10,461	1,193	229
1907	10,424	963	228
1908	10,410	875	202
1909	10,120	851	198
1910	10,047	821	165
1911	9,963	785	164
*1912	9,934	1,284	221
1913	9,790	1,269	217
1914	9,760	1,211	207
1915	9,738	1,047	188
1916	9,725	1,026	185
1917	9,723	1,023	169
1918	9,693	1,022	166
1919	9,655	1,014	166
†1920	9,594	1,051	155
1921	9,521	900	128
1922	9,324	651	111
1923	9,256	558	102
1924	8,781	472	101
1925	8,222	332	94
‡1926	7,685	332	219
1927	6,447	294	197
§1928	4,440	435	267
1929	3,647	360	256
1930	2,772	322	230
1931	1,589	300	227
1932	1,158	248	205
1933	1,063	228	185
1934	1,030	215	181
1935	626	208	179
1936	270	198	159

\*Roundhay, Seacroft, Shadwell and Crossgates were added to the city in this year. In this area there were 502 privies and 61 pail closets.

†Middleton was absorbed in this year. In this area there were 148 privies.

‡Portion of Adel was added to the city in this year. In this area there were 65 privies and 136 pail closets.

§Eccup, Alwoodley, Templenewsam and Austhorpe were added to the city in this year. In these areas there were 192 privies and 106 pail closets.

||This is a corrected figure obtained as a result of a recent census.

1936, amounted to 164,956 tons, of which 107,912 tons were dealt with at the destructors and 57,044 tons were disposed of at controlled tips and for agricultural purposes.

The mechanisation of the system now in progress is effecting a notable and much needed improvement in the collection and transport of refuse. Incidentally this change of policy will greatly benefit the public health.

**Ashpits and Ashbins.**—During the year 882 ashpits were abolished, of which 36 were of the sunken variety. On December 31st, 1936, there still remained in the city 277 sunken ashpits and 3,585 ashpits of other types. Of these approximately 179 and 909 respectively will disappear in consequence of slum clearance, and the remainder will be dealt with as part of the Health Committee's scheme of ashpit conversion.

Since the commencement of the scheme, the total number of ashpits dealt with to December 31st, 1936, was 1,244 and ashbins provided 4,074, at a total cost to the Corporation of £2,718 6s. 6d. The average cost per conversion was £2 3s. 8d. From the large numbers of applications still being received it is evident that the scheme has the support of the property owners.

In response to the representations from the Department a further 4,731 metal ashbins were provided to replace bins which were worn or missing. Of this number 65 were supplied in default.

Particular attention is being paid by the sanitary inspectors to the misuse of ashbins, and in this connection occupiers are reminded from time to time of their duty to see that the receptacles provided are used in the proper manner.

**Public Conveniences.**—The need still exists for additional public conveniences in various parts of the city as well as for the reconstruction of many of those now existing. A report submitted to a meeting of the Health Committee in May, 1935, showed that of the 56 public urinals and conveniences for males 38 were satisfactory while the remaining 18 were unsatisfactory. Of the latter 12 have offensive slate stalls, 4 have slate and iron stalls, and 2 are "all-iron" structures.

The accommodation for females consists of 40 water-closets provided in 12 conveniences in different parts of the city.

The reconstruction of the convenience adjoining the public library at the top end of Woodhouse Moor, and that in Camp Road, are well in hand ; contracts have also been let for the reconstruction of the conveniences in Gelderd Road (Cattle Market) and Kirkstall Road. The last mentioned will be completed early in 1937. The convenience for males in Hunslet Road (adjacent to the works of Messrs. Fawcett) has been demolished and the site handed back to this firm to whom it belongs. Regarding the sites at the Hyde Park end of Woodhouse Moor, and Town Street, Stanningley, the City Engineer has the preparatory work still in hand. So far, I have not been successful in obtaining a suitable site near the " Oak " Headingley. Sites are also required in Roundhay Road (near Harehills Corner) and in Harrogate Road (near the end of Stainbeck Lane), but have not yet been secured. To obtain suitable sites for this purpose anywhere in the city is most difficult. Such sites as are available are either in the wrong place or not of convenient size. When a good site is found in the majority of cases the owner refuses to sell. In the absence of power of compulsory purchase the Corporation is at a great disadvantage.

**Flushing.**—The flushing services continued as previously. The work has been carried out efficiently and during the past year 8,725 flushing operations were carried out in connection with public conveniences, and 254 at private properties. The income derived from private flushings was £82 1s. 8d.

**The Rent and Mortgage Interest Restrictions Acts, 1920 to 1935.**—During the year 4 applications for certificates were received and 4 certificates were issued by the Department. Since the introduction of the above Acts in 1920, up to the end of 1936, 1,454 applications for certificates have been received and 1,374 certificates and 40 reports issued by the Department.

**Section 17, Housing Act, 1930.**—Repair work under this Act was unfortunately interrupted from early December 1935 to April, 1936, by the overcrowding survey in connection with the Housing Act, 1935, which absorbed the time of 18 sanitary inspectors and necessitated the suspension of all except the most urgent sanitary work.



A further survey of some 30,000 additional houses commenced in December, 1936, and is still going on, again holding up the work in the Department.

During the year 118 houses were examined under Section 17 of the Housing Act, 1930, and 3,082 defects were found. At 76 houses the defects were remedied, and in this connection it is gratifying to record that in no instance was it necessary to do the work in default.

**Housing Act, 1935.**—*Overcrowding Survey.*—The Act provides that, after a date to be fixed by the Minister of Health, it will be an offence for any occupier or landlord of a dwelling-house to cause or permit that house to be overcrowded. The Minister has now fixed the date for the City of Leeds as the 1st April, 1937.

It was therefore necessary that a special survey of the working class dwelling-houses in the city be made for the purpose of ascertaining the degree of overcrowding existing, and instructions were issued that the work entailed be carried out by the sanitary inspectors of the city. For this purpose 18 sanitary inspectors, each accompanied by a "tape boy," commenced work on the survey on December 3rd, 1935, and continued daily until March 27th, 1936. During this period 244,177 rooms were measured in 61,212 dwelling houses of the working class type. This total did not include the 30,000 houses in scheduled areas.

During the four months of the survey, only urgent matters and nuisances could be dealt with by the skeleton staff remaining, and by the end of March, 1936, huge arrears of work had accumulated which were not overtaken until the end of the year.

Meanwhile the Minister of Health had decided that without the 30,000 houses in the slum areas the survey was not complete and desired the local authority to make good the omission.

Accordingly in December, 1936, the sanitary inspectors were again called upon to forsake their ordinary duties and turn to the measurement of the 30,000 houses. The work is still in progress but I hope will be completed during the early part of 1937.

The splitting of the survey into two parts is much to be regretted as it has disorganised the work of the Department to an extent greater than would have been the case had the whole of the work been done at one time.



**Leeds Corporation Act, 1927, Section 95.**—During the year two cases were dealt with under these powers. In each instance the person concerned was removed to an appropriate institution after application had been made to the Court and an order for removal obtained.

It is also interesting to note that 4 cases were dealt with and removed voluntarily, without application to the Court.

**Offensive Trades.**—Below is a table showing the nature and number of scheduled offensive trades which were being carried on in the city at the end of the year.

OFFENSIVE TRADES.

Nature of Trade.					Number of each Trade.
Bone Boiler	..	..	..	..	5
Fellmonger	..	..	..	..	2
Fat Melter	..	..	..	..	11
Glue Maker	..	..	..	..	2
Gut Scraper	..	..	..	..	4
Leather Dresser	..	..	..	..	23
Rag and Bone Dealer	..	..	..	..	33
Size Maker	..	..	..	..	4
Soap Boiler	..	..	..	..	5
Tanner	..	..	..	..	16
Tripe Boiler	..	..	..	..	11
Fish Frier	..	..	..	..	543
Total					659

During the year 1,622 visits of inspection were made to premises in which offensive trades were carried on or in respect of which applications had been received for permission to establish such trades.

*Fish Frying.*—During the year 12 applications were received for permission to establish the offensive trade of a fish frier, of which 4 were rejected.

The internal renovation of existing fish shops, excluding those in scheduled areas, has now reached completion, and a very much improved standard of cleanliness and hygiene obtains.

## ANALYSIS OF WORK DONE BY DISTRICT INSPECTORS, 1936.

	EASTERN DIVISION.	WESTERN DIVISION.	CITY TOTALS.
<b>HOUSE INSPECTION.</b>			
1. Houses and premises	962	435	2,397
2. } completely examined { Infectious disease ...	22	37	59
3. } on account of { Alleged nuisances ..	79	43	122
4. Houses and premises	375	98	473
5. } examined only { Occupants .. ..	3,262	7,871	11,133
6. } as to { Alleged nuisances ..	207	304	511
7. Number of houses wholly or partly examined	4,907	9,788	14,695
8. Total number of above houses where sanitary defects or nuisances were found .. ..	3,349	8,090	11,439
<b>NUISANCES FOUND DURING ABOVE EXAMINATIONS AND DAILY INSPECTIONS.</b>			
9. Houses dirty .. .. .	68	51	119
10. Overcrowded houses .. .. .	15	73	88
11. Defective roofs, fallpipes and spouting, &c... ..	1,801	2,545	4,346
12. Defective drains .. .. .	351	282	633
13. Houses without proper drains .. .. .	7	7	14
14. " without proper water supply .. .. .	17	7	24
15. Privies .. .. .	11	3	14
16. Additional closets required .. .. .	8	—	8
17. Pail closets .. .. .	1	—	1
18. Defective or unsuitable trough or water closets	998	1,140	2,138
19. Ashpits { (a) Sunken .. .. .	4	48	52
	136	518	654
20. Houses with unsuitable or insufficient ashes accommodation .. .. .	1,870	3,576	5,446
21. Dirty closets .. .. .	68	134	202
22. Defective or dirty yard surfaces .. .. .	123	62	185
23. Stopped drains .. .. .	995	779	1,774
24. Other nuisances .. .. .	2,181	2,254	4,435
25. Other housing defects .. .. .	1,271	1,811	3,082
26. Number of houses affected by above nuisances	8,033	10,730	18,763
27. Offensive accumulations and other outside nuisances including manure pits and cess-pools .. .. .	243	80	323
28. Pollutions of river or streams .. .. .	2	4	6
29. Animals (pigs, poultry, etc.) improperly kept	43	21	64
30. Offensive urinals .. .. .	7	8	15
31. Total nuisances and housing defects found .. ..	10,220	13,403	23,623
32. Complaints unfounded .. .. .	198	89	287
33. Additional { Infectious disease .. .. .	283	229	512
34. } visits paid { Non-abated Nuisances .. .. .	4,757	9,804	14,561
35. } to houses { Inspection of work in progress .. ..	1,450	895	2,345
36. } for { Other causes .. .. .	2,353	1,797	4,150
37. Visits on account of special enquiries .. .. .	25,712	34,171	59,883
38. *Visits to offensive trades .. .. .	407	1,128	1,535
39. Visits to bakehouses .. .. .	775	1,126	1,901
40. Visits to rat-infested premises .. .. .	433	532	965
41. Appointments .. .. .	557	439	996
<b>DRAIN TESTING.</b>			
42. Number { House-to-house inspection .. ..	54	35	89
43. } of tests { Nuisance complaints .. .. .	195	306	501
44. } applied to { Requests .. .. .	71	43	114
45. } drains on { Infectious disease .. .. .	884	1,400	2,284
46. } account of { Work in progress .. .. .	331	189	520

\* In addition to the above, 87 visits were paid by the Workshops Inspectors to Offensive Trades.

## ANALYSIS OF WORK DONE BY DISTRICT INSPECTORS—1936—contd.

	EASTERN DIVISION.	WESTERN DIVISION.	CITY TOTALS.
47. Number of informal notices served .. ..	3,706	3,201	6,907
48. Number of statutory notices served.. ..	705	643	1,348
<b>NUISANCE ABATEMENT.</b>			
49. Metal ashbins provided .. .. .	1,462	3,269	4,731
50. Houses cleansed.. .. .	40	31	71
51. Overcrowded houses dealt with .. ..	9	5	14
52. Defective roofs, fallpipes and spouting, &c. repaired .. .. .	1,463	2,815	4,278
53. Disconnection of house drains .. ..	51	52	103
54. Other drainage works .. .. .	262	198	460
55. Houses provided with proper drains ..	6	4	10
56. Houses supplied with town's water ..	13	—	13
57. Privies abolished or converted into water closets .. .. .	4	6	10
58. Water closets erected { (a) Outside .. ..	—	—	—
(b) Inside .. ..	5	1	6
59. Pail closets abolished or converted into water closets .. .. .	2	18	20
60. Trough closets converted into water closets ..	113	24	137
61. Trough and water closets repaired .. ..	637	1,010	1,647
62. Ashpits abolished { (a) Sunken .. ..	9	16	25
(b) Other than sunken ..	200	585	785
63. Houses provided with suitable ashes accom- modation .. .. .	1,700	3,507	5,207
64. Closets cleansed (limewashed, etc.) .. ..	63	133	196
65. Yard surfaces repaired or renewed .. ..	71	41	112
66. Stopped drains cleared.. .. .	923	670	1,593
67. Other nuisances remedied .. .. .	1,696	1,945	3,641
68. Other housing defects remedied .. ..	968	105	1,073
69. Total houses for which above work done ..	6,628	10,366	16,994
70. Offensive accumulations removed .. ..	138	57	195
71. New manure pits or metal receptacles provided	4	—	4
72. Manure pits repaired .. .. .	—	2	2
73. Pollutions of river or streams abated ..	—	4	4
74. Animals improperly kept removed .. ..	25	5	30
75. Offensive urinals dealt with .. .. .	5	4	9
76. Cesspools filled up .. .. .	4	3	7
77. Public or private wells abolished .. ..	—	—	—
78. Total nuisances and housing defects abated	8,411	11,241	19,652
79. Abated in response to prelim. notices or volun.	6,825	10,437	17,262
80. Abated in response to statutory notices ..	1,586	804	2,390
<b>HOUSING ACT, 1930 SECTION 17.</b>			
81. Number of houses where defects found ..	67	51	118
82. Number of houses where defects remedied..	51	25	76
83. Defects remedied { (a) Prelim. Notices or Volun	20	17	37
in response to { (b) Statutory Notices ..	31	8	39
84. Number of informal notices served .. ..	—	1	1
86. Number of statutory notices served.. ..	52	45	97

**District Sanitary Inspection.**—As observed in an earlier paragraph routine sanitary inspection was seriously interfered with during the year by the overcrowding survey. This is reflected in the figures of work done given in the table on pages 237 and 238.

The number of preliminary notices served during the year for the abatement of nuisances was 6,907 and the number of statutory notices 1,348. Of the latter 1,099 have been effective and 249 were outstanding at the end of the year.

In connection with common lodging-houses, houses-let-in-lodgings, etc., there were served during the year 300 preliminary and 157 statutory notices.

In addition 289 preliminary and 46 statutory notices were served in connection with factories, workshops and workplaces.

It will again be seen that the inspection of houses and premises in connection with 2,397 notified cases of infectious diseases and the 512 additional visits made chiefly in connection with cases of diphtheria and scarlet fever made heavy demands on the inspectors' time.

*Training of Sanitary Inspectors.*—Nine student sanitary inspectors received training in the Department during the year.

The scheme for training sanitary inspectors instituted in 1933 resulted in two student probationers completing their second year of training. Both were successful in obtaining the Sanitary Inspector's Certificate of the Royal Sanitary Institute at the end of the first year's training. Two first year students were appointed under the scheme during the year.

**Common Lodging Houses.**—Strict supervision of the 19 common lodging-houses in the city has been maintained, and it can be safely claimed that the standard of cleanliness in these is high.

During the year it was not found necessary to take legal proceedings against any keeper of a common lodging-house.

At the end of the year there was available in the city the following accommodation in registered premises :—

For men 16 houses, with 1,058 beds.

For women 1 house, with 23 beds.

## COMMON LODGING-HOUSES.

COMMON LODGING HOUSES.						
Number registered—						
Men's	16	Beds available	1,058	}	..	..
Women's	1	"	"		23	
Routine visits to all common lodging-houses..					658	
Visits as to drain tests and abatements ..					73	
Visits to smallpox contacts .. ..					..	
Visits for infectious disease .. ..					..	
Preliminary notices served .. ..					16	
Statutory notices served .. ..					..	
Nuisances found and abated :—					FOUND.	ABATED.
Dirty closets .. ..					8	8
Dirty rooms .. ..					7	2
Dirty bedding .. ..					87	87
Defective or stopped drains .. ..					8	8
Defective roofs or eaves spouts .. ..					11	11
Other nuisances .. ..					86	86
Total .. ..					207	202

## HOUSES-LET-IN-LODGINGS.

				HOUSES.	ROOMS.
Registered during 1936, let as furnished rooms				..	..
On register at end of 1936 .. ..				100	691
Houses-let-in-lodgings visited though not registered .. ..				52	376
Drains tested 154, in 70 houses					
Drains re-tested 1					
Visits for inspection of nuisance abatement and requirements of byelaws..				682	
Visits for other causes .. ..				410	
,, infectious disease (4 cases) ..				4	
,, additional inspection .. ..				467	
Preliminary notices served .. ..				258	
Statutory notices served .. ..				157	
Nuisances—				FOUND.	ABATED.
Dirty or bad bedding .. ..				4	4
Dirty rooms .. ..				156	103
Overcrowding .. ..				14	12
Dirty closets .. ..				16	15
Other nuisances .. ..				450	434
Structural defects .. ..				157	137

Included in the above are three registered lodging-houses for men, controlled by the Salvation Army and by the Church Army, with a total of 376 beds.

In the year under review the beds in the 16 men's lodging-houses were occupied on 303,148 occasions, the average number of beds vacant nightly being 228. The 23 beds in the women's lodging-house were occupied on 6,288 occasions. The women's lodging-house at 121, Templar Street was discontinued as a lodging-house on March 29th, 1936. This house had accommodation for 74 beds which were occupied on 3,488 occasions up to the date of closure. Since the closing of this house no accommodation has been provided for children.

It may be noted that the common lodging-house at 15 and 17 High Court Lane, which ceased to be a common lodging-house in June, had accommodation for 34 beds, which were occupied on 2,418 occasions up to the date of closure.

As many of the common lodging-houses stand in areas included in the Corporation's programme of slum clearance, it may be anticipated that there will be a considerable reduction in the present total within the next few years. Already in consequence of slum clearance 11 houses (men) and 3 houses (women) no longer exist.

During the year two changes of Deputy Keeper have taken place.

The table on page 240 sets forth the work carried out in respect of the common lodging-houses during 1936.

**Houses-let-in-Lodgings.**—The control of this type of house continues to be a difficult problem and frequent inspections are necessary. The number of statutory notices served for breaches of the byelaws was 133, and of these 119 were complied with. In addition 24 statutory notices were served for nuisances, etc. under the Public Health Act, all of which were complied with.

At the end of the year 100 houses with 691 rooms were on the register. There were no new registrations during the year.



During the year 69 houses were found on inspection to come within the control of the byelaws. Of these 46 have been closed or are now occupied by one family, and the remaining 23 houses are being dealt with.

There have also been visited 136 houses, with 961 rooms, occupied by persons other than the working classes.

Details of the work in connection with houses-let-in-lodgings will be found in the table on page 240.

**University Lodgings.**—As in previous years the usual procedure has been followed and the lodgings on the register of approved premises for the use of University students were duly inspected and the results reported to the University Authorities. In this connection the following details are given :—

	HOUSES.	ROOMS.
New lodgings inspected during 1936 ..	68	161
Drains tested—150 drains in 68 houses		
Total number of visits to the above houses—70.		

Details of sanitary defects found and rectified are included in the table under houses-let-in-lodgings.

**Residential Flats.**—The special inspectors concerned paid 35 visits to the 101 flats in the city.

It might be added that in connection with the overcrowding survey (already referred to) there were measured 59 houses with 148 combined rooms and 306 other rooms, also 25 residential flats, 95 tenement houses, and 506 houses containing 1,909 rooms on the Sutton Estate. Measurement of rooms was also carried out at 36 houses not of the working-class type.

**Cellar Dwellings and Underground Sleeping Rooms.**—During the year 26 underground sleeping rooms were found. Alternative accommodation was found in 24 cases and the remaining 2 are being dealt with.

The only cellar dwellings remaining in the city are the 9 houses in Bath Street. All are occupied by aged people.

Below are particulars of visits, nuisances found and abated, and notices issued :—

Visits to cellar dwellings .. .. .	18	
Visits to underground sleeping-rooms ..	26	
Visits on account of nuisance abatement ..	25	
Visits for other causes .. .. .	..	
Preliminary notices served .. .. .	26	
Statutory notices served .. .. .	..	
Nuisances :—		
Underground sleeping-rooms .. .. .	FOUND. 26	ABATED. 24
Other nuisances .. .. .	..	..

**Tents and Vans.**—During the year 10 additional camping-grounds were found, bringing the total to 16. Of these camping grounds, 10 have been closed and 12 vans and tents removed. There still remained at the year end 6 camping grounds with 14 caravans. With the exception of Brewery Yard, the other sites contain only one or two vans.

No legal proceedings were taken during the year.

The following table gives details of the several inspections made :—

Visits to vans (158 vans) .. .. .	672	
Visits to tents (13 tents) .. .. .	13	
Visits on account of infectious disease ..	..	
Visits to camping grounds .. .. .	170	
Visits on account of nuisances .. .. .	84	
Camping grounds closed .. .. .	15	
Statutory notices served .. .. .	..	
Nuisances :—		
Dirty camping grounds .. .. .	FOUND. 10	ABATED. 9
Dirty vans .. .. .	2	2
Overcrowded vans .. .. .	3	3
Camping places without sanitary accom- modation .. .. .	10	9
Tents and vans not habitable .. .. .	5	5
Other nuisances .. .. .	18	18

**Canal Boats.**—The work in connection with the registration and inspection of canal boats has been carried on as in past years.

No legal proceedings were instituted under the Canal Boats Act, 1877, or under the Canal Boats Amendment Regulations, 1925, there being no serious contraventions.

#### CANAL BOATS.

Registered during the year 1936 .. ..	4
Re-registered and Transferred to fresh owners ..	1
Re-registered owing to structural alterations .. ..	..
Struck off register (on revising register) .. ..	..
Remaining on register at end of year .. ..	117
Visits of inspection to wharves and locks .. ..	309
Complete inspections of boats .. ..	301
Cases of infectious disease .. ..	..
Cases of overcrowding .. ..	..
Dirty cabins .. ..	3
Absence of registration certificate .. ..	2
Boats not marked with registered number .. ..	7
„ not provided with water cask .. ..	..
„ requiring painting or repairing .. ..	5
„ found to be not registered .. ..	..
Number of children of school age found on registered boats—1 boat, 1 child.	

**Sanitation of Schools.**—A separate report is issued by the School Medical Officer, and this includes particulars relating to the sanitary circumstances of the Leeds schools.

During the year 138 trough-closets have been converted into modern pedestal water closets at 5 Council Schools. There still remain to be converted 76 trough-closets at 6 schools. The conversion of trough-closets at schools is a reform which is long overdue and it is gratifying to note that the matter is receiving the attention of the Education Committee.

**Rat Suppression.**—As in past years, the Annual Rat Week was held in November when an effort was made to educate the public concerning the damage to health and property occasioned by rats. In addition, a rat film was shown in two cinemas, and thanks to the valuable support given by the Press a good deal of interest was created. The co-operation of the City Engineer's Department, Cleansing Department, Markets Department and Sewerage Department was enlisted and special measures were taken against sewer rats. Tips and refuse dumps received special attention.

The number of complaints received was 334. Particulars of the work done under the Rats and Mice (Destruction) Act, 1919, are as follows :—

Complaints received .. .. .	334
Premises inspected .. . . .	749
Premises cleared .. . . .	291
Rats caught or found poisoned .. .	2,822
Visits for purposes of observation of work in progress .. . . .	999
Visits for other purposes—interviews with owners of infested premises and the like	194
Informal notices served .. . . .	93
Notices complied with .. . . .	85

**Pig Keeping.**—Constant supervision has not been possible during the year, due to the inspectors being occupied with the overcrowding survey. No legal action had to be taken to ensure compliance with the byelaws.

At the end of the year the total number of persons (excluding farmers) keeping pigs had decreased from 217 in 1934 to 169 in 1935, and to 159 in 1936.

**Plans.**—The system whereby those plans submitted to the Building Surveyor which deal with schemes involving sanitary works, offensive trades, and houses-let-in-lodgings, etc., are reviewed by this Department before being finally approved by the Corporation, was continued during 1936. The total number of plans examined and commented upon was 317.

**Factory and Workshop Act, 1901.**—A complete summary of the work done during the year under the above Act appears on pages 250 and 251.

Close co-operation continued to be maintained between the Department and H.M. Factory Inspectorate.

OTHER VISITS PAID BY MALE WORKSHOPS INSPECTORS.

	Factories.	Workshops.	Workplaces.
Non-abatements .. ..	150	144	3
Drain Inspection .. ..	33	22	4
Drains tested .. ..	30	20	2
Disease enquiries .. ..	114	17	11
River pollution .. ..	..	..	..
Complaints .. ..	106	32	3
Measurement of workrooms ..	2	51	2
Other causes .. ..	376	81	3
<b>TOTAL .. ..</b>	<b>811</b>	<b>367</b>	<b>28</b>

**Work of Women Inspectors.**—During the year the two women inspectors carried out their various duties, comprising visiting of outworkers, investigation of outbreaks of infectious diseases in factories and workshops, the routine inspection of shops, workshops and certain restaurants, and the investigation of complaints received from the factory inspectors or other sources relating to sanitary defects affecting the health of female workers. The following is a summary of the year's work :—

*Infectious Diseases.*—The following visits were made :—

To factories (134 cases) .. ..	152
To workshops (1 case) .. ..	1
To workplaces, including restaurants ..	32
To absent employees .. ..	—
Special visits .. ..	15

*Factories and Workshops.*—Part of the work done by the women inspectors under this heading appears on pages 250 and 251.

In addition to that appearing in the table the following visits were paid :—

Outworkers' homes	..	..	..	..	548
Outworkers, employers' premises	..	..			135
Factories	..	..	..	..	48
Workshops (routine and complaint)	..	..			545
Workplaces and restaurants	do.	..	..		785
Special visits	..	..	..	..	77
					<hr/> 2,138 <hr/>
Inspections of public sanitary conveniences					
for women	..	..	..	..	220
Nuisances found 90, abated 81.					

The work done in connection with the inspection of shops is included under the heading of Shops Act, 1934.

**Public Health Act, 1925, Sections 45 and 46.**—Power is given under this Act on the certificate of the Medical Officer of Health or Sanitary Inspector to deal with articles and premises infested with vermin. In dealing with bug infested houses and furniture under the Slum Clearance Schemes, an inspection is made of all houses where re-housing of the slum tenant in a new house is proposed.

Since August, 1934, when it became possible to treat infested furniture by hydrocyanic acid gas at the newly erected disinfecting station, up to the end of the year under review, 7,171 houses were examined by the sanitary inspectors. Of this number 6,795, or 94·8 per cent., were certified as bug infested and 376, or 5·2 per cent. were found to be free from vermin.

A record of houses inspected approximately 14 days after fumigation had been carried out shows that 3,865 houses so treated gave a negative result and 49 houses a positive result. The houses found to be bug infested had all been previously occupied whilst the negative cases were new houses not previously let.

Apart from houses included in clearance areas, action was taken at 119 other dirty and verminous houses, 71 of which were disinfested and the remaining 48 were in process of being cleansed and disinfested at the end of the year.

**Shops Act, 1934.**—The total number of shops inspected during the year was 1,497. In 275 of these, conditions obtained which



contravened the provisions of the Act. The number and nature of these contraventions were briefly as follows; ventilation and heating 35; sanitary conveniences 386; lighting 6; washing facilities 52; facilities for the taking of meals 7; temperature 4.

During the year there were served 381 informal and 56 statutory notices. Of these 23 and 35 respectively were outstanding at the end of the year.

The work done during, and the position at the end of, the year is indicated in the following table:—

SHOPS ACT, 1934.

Shops provided with suitable and sufficient :—	
Ventilation .. .. .	11*
Ventilation and sanitary conveniences .. ..	5
Ventilation and washing facilities .. ..	1
Temperature .. .. .	3
Sanitary conveniences .. .. .	166
Sanitary conveniences and washing facilities ..	3
Washing facilities .. .. .	19
Washing facilities and facilities for the taking of meals .. .. .	2
Facilities for the taking of meals .. .. .	2
Shops for which an exemption certificate has been granted in respect of sanitary conveniences and/or washing facilities .. .. .	5
Shops at which requirements of notices have not yet been complied with .. .. .	58
Shops at which the existing conditions were found to comply with all the requirements of the Act ..	1,222
TOTAL .. .. .	1,497

\* Exemption certificate in respect of sanitary conveniences and/or washing facilities have also been granted for 2 of these shops.

During the inspection of shops there were observed some 100 defects remediable under the law relating to public health, and of these defects 86 were remedied. In this connection there were served 42 preliminary notices and 12 statutory notices. Appropriate action will be taken to deal with the defects outstanding at the end of the year.

In connection with this particular branch of the Department's activities, there were paid 442 visits for the purpose of securing the remedying of existing defects and 60 visits in respect of works

in progress. Further, 178 appointments were kept with owners, agents and contractors.

**Public Health Act, 1925, Section 73.**—It is an offence to distribute any article of food, or any balloon or other toy by any collector or dealer in rags and bones or similar articles. In this connection two rag and bone dealers were proceeded against and penalties of ten shillings and five shillings respectively were imposed.

**Removal of Offensive or Noxious Matters.**—During the year 4 persons contravening the bye-laws relating to the carriage of offensive or noxious material were warned. Proceedings were taken against one defaulter and the case was dismissed on the payment of court costs.

**Rag Flock Acts, 1911 and 1928.**—During the year 20 visits were made to premises occupied by persons manufacturing or using rag flock. Eight samples were taken and submitted to the City Analyst for analysis and all were found to comply with the legal standard of not more than 30 parts of chlorine per 100,000. The average amount of chlorine found to be present was 20 parts per 100,000 as compared with 16.3 for the previous year.

This is the sixth year in succession in which all the samples have been satisfactory.

During the year a series of samples of feathers used for the stuffing of pillows were taken in the city at the request of the Medical Officer of Health for Manchester. On the whole the results proved disappointing when judged by the standard of the rag flock produced in the city.

**Mortuary Accommodation.**—The number of bodies dealt with at the Marsh Lane Mortuary during the year was 367, comprising 332 admitted from private houses, workshops, etc., 14 from rivers and lakes, 18 as a result of street accidents, and 3 unclaimed bodies. The number dealt with in the previous year was 302.

For a city the size of Leeds the accommodation provided at the one and only public mortuary in Marsh Lane is totally inadequate, not only so, but the lay-out and equipment of the mortuary are out-of-date and most unsatisfactory. One of the greatest needs of the city at the present time is increased and improved mortuary accommodation. One shudders to think what would be the position of an accident or disaster of unusual dimensions occurred in or in the vicinity of the city.

# FACTORIES AND WORKSHOPS.

## I.—INSPECTION.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions
Factories .. .. . (Including Factory Laundries.) ..	423	218	..
Workshops .. .. . (Including Workshop Laundries.) ..	1,676	125	..
Workplaces .. .. .	824	32	..
Total .. .. .	2,923†	375	..

## 2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts :—*</i>				
Want of cleanliness .. ..	56	60	..	..
Want of ventilation .. ..	12	14	..	..
Overcrowding .. .. .	..	..	..	..
Want of drainage of floors ..	2	1	..	..
Other nuisances .. .. .	410	401	..	..
Sanitary accom- modation. { insufficient ..	33	22	..	..
{ unsuitable or { defective ..	141	140	..	..
Sec. 22 in force. { not separate for { sexes ..	9	11	..	..
<i>Offences under the Factory and Work- shop Act :—</i>				
Illegal occupation of underground bakehouse (S. 101) .. ..	..	..	..	..
Breach of special sanitary require- ments for bakehouses (SS. 97 to 100) .. .. .	29	29	..	..
Other offences .. .. .	..	..	..	..
Total .. .. .	692	678	..	..

\* Including those specified in Sections 2, 3, 7, and 8 of the Factory Act as remediable under the Public Health Acts.

† Exclusive of 1,901 visits to 594 bakehouses by ward inspectors, see page 252.

## 3, 4, 5.—OTHER MATTERS.

	Number of		
	Lists.	Outworkers.	
Homework :—		C.	W.
<i>List of Outworkers (S. 107) :—</i>			
Lists received twice in the year .. .. .	320	523	576
„ once in the year .. .. .	12	13	26
Addresses of ) received from other Authorities ..		82	
outworkers / forwarded to other Authorities .. ..		..	
Notices to occupiers as to keeping or sending lists ..		384	
Prosecutions.. .. .		..	
Inspection of Homeworkers' premises .. .. .		513	
<i>Homework in unwholesome premises :—</i>			
Instances .. .. .		12	
Notices .. .. .		12	
Prosecutions.. .. .		..	
<i>Homework in infected premises :—</i>			
Instances .. .. .		6†	
Orders made (S. 110) .. .. .		6	
Prosecutions (SS. 109, 110) .. .. .		..	
[Infectious cases removed, disinfection carried out under ordinary powers.]			
<i>Workshops on the Register (S. 131) at the end of year :—</i>			
Ordinary (132 trades) .. .. .		943	
Domestic (4 trades) .. .. .		32	
Bakehouses on register as workshops .. .. .		278	
Do. domestic .. .. .		316	
Total number of workshops on Register .. ..		1,569	
<i>Matters notified to H.M. Inspectors of Factories :—</i>			
Failure to affix Abstract of the Factory and Workshop Act (S. 133) .. .. .		..	
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5) {	Notified by H.M. Inspector ..	84	
	Reports (of action taken) sent to H.M. Inspectors..	96	
Other .. .. .		..	
<i>Underground Bakehouses (S. 101) :—</i>			
Certificates granted during the year .. .. .		..	
In use at the end of 1936 .. .. .		24	

† 2 Diphtheria, 4 Scarlet Fever.

The above table is that required by the Home Office and represents work done by the male workshops inspectors and by the women inspectors.

## BAKEHOUSES.

WARD.	OVERGROUND.			UNDERGROUND.			Total visits to all.
	Em- ployees beyond family.	Work- shop bake- houses.	Domestic bake- houses.	Em- ployees beyond family.	Work- shop bake- houses.	Domestic bake- houses.	
Mill Hill and South	42	in 10	17	1	in 1	..	49
Westfield .. ..	33	„ 18	18	..	..	..	80
Blenheim .. ..	28	„ 10	9	5	in 3	..	62
Central .. ..	159	„ 24	8	2	„ 2	..	43
Woodhouse.. ..	22	„ 8	21	..	..	3	46
North .. ..	21	„ 11	4	1	in 1	1	47
Far Headingley ..	11	„ 7	12	..	..	..	75
Hyde Park.. ..	22	„ 13	3	7	in 5	..	106
Kirkstall .. ..	16	„ 8	15	3	„ 2	..	103
Burmantofts ..	31	„ 13	8	1	„ 1	..	36
Harehills .. ..	35	„ 18	19	..	..	..	92
Potternewton ..	15	„ 7	7	2	in 1	1	28
Roundhay .. ..	34	„ 9	1	..	..	..	47
Cross Gates and Templenewsam ..	21	„ 13	5	..	..	..	178
Richmond Hill ..	4	„ 4	..	..	..	..	57
Osmondthorpe ..	14	„ 10	8	..	..	..	43
East Hunslet ..	13	„ 5	25	..	..	..	126
Hunslet Carr and Middleton .. ..	9	„ 5	3	..	..	2	80
West Hunslet ..	31	„ 13	15	2	in 1	..	52
Beeston .. ..	8	„ 6	10	..	..	..	50
Holbeck (South) ..	45	„ 6	7	..	..	..	58
Holbeck (North) ..	87	„ 9	27	..	..	..	93
Armley and New Wortley .. ..	7	„ 5	14	..	..	..	73
Upper Armley ..	16	„ 10	20	..	..	..	94
Bramley .. ..	21	„ 14	18	..	..	..	102
Farnley & Wortley	5	„ 5	15	..	..	..	81
Totals .. ..	750	in 261	309	24	in 17	7	1,901

These visits made by Ward Inspectors only. This work is included in the figures in the table on page 237.

## SMOKE ABATEMENT.

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The state of the atmosphere in Leeds shows little sign of betterment; indeed if the soot fall and daylight records are to be taken as a criterion it is growing worse. The explanation is probably to be found in the improved industrial position which has brought more work to the city and thereby increased the output at all the mills and factories. Increased output, especially in the heavy industries, invariably means increased consumption of coal which again results in greater emission of smoke. Except in the iron and steel trades, I do not admit that increased output should necessarily result in more smoke. On the contrary, with good management, the employment of trained stokers, and the use of a good class of fuel, there should be no difference in the amount of smoke discharged from the chimney top whether the mill be working at high or low pressure. If the position with regard to industrial smoke is unsatisfactory, not less so is that with regard to domestic. It would make such a difference to the state of the atmosphere if householders would abandon the burning of raw coal in the open grate and substitute one of the solid smokeless fuels such as high or low temperature coke. There are two obstacles to such a course, first the price, and secondly the limited supply. I am convinced, however, that if the public were really in earnest in their desire for clean air the production of smokeless fuel would very soon meet the demand and with the increased production there would be a corresponding fall in the price. Even to-day graded coke can be had from the Leeds Gas Department at 1s. 1d. per 84 lb. bag delivered, which works out at about 29s. a ton, a figure which compares very favourably with good household coal

The great fog of last November which lasted nearly six days, dislocating traffic and giving rise to untold inconvenience and expense, to say nothing of the effect it had on health, was surely sufficient evidence to convince even the most confirmed coal-fire enthusiast of the folly and wastefulness of the present method of using coal. The cost to the city of that fog probably ran into many thousands of pounds, a great deal of which with smokeless fires in the homes of the people could have been saved.



The table on page 257 shows the work of the smoke inspectors during the year. The average duration of black smoke per observation was 33·6 seconds as compared with 31 seconds for the previous year, and the number of chimneys found offending against the byelaw was 52 as against 50 for the previous year. The ratio of offending chimneys to observations in 1936 was 1 to 143 which works out at a percentage of 0·7 as compared with 1 to 141 and a percentage of 0·7 for the previous year. For the previous five years the average ratio was 1 to 117 or a percentage of 0·9.

*West Riding of Yorkshire Regional Smoke Abatement Committee.*—The Executive Committee held six meetings during the year, and the average attendance was 19.

Details of its work will be found in the Annual Report of the Executive Committee, copies of which may be had from the Secretary of the Committee at 12, Market Buildings, Leeds, 1.

SOOT DEPOSIT RECORDS, 1926-1936.  
ENGLISH TONS PER SQUARE MILE PER ANNUM.

Year.	STATIONS.				
	Heading- ley.	Park Square.	York Road.	Hunslet.	Temple- newsam.
1926 .. ..	98·02	307·7	*288·1	362·8	..
1927 .. ..	*133·5	354·5	391·9	501·2	..
1928 .. ..	141·9	349·5	319·2	304·3	‡61·2
1929 .. ..	*108·4	321·0	302·6	305·4	†80·4
1930 .. ..	123·9	344·3	299·5	290·5	101·8
1931 .. ..	126·5	336·2	*266·9	268·5	109·3
1932 .. ..	105·8	320·7	264·7	255·6	87·5
1933 .. ..	107·86	305·00	277·83	*276·32	*81·59
1934 .. ..	124·28	341·70	284·74	294·49	86·24
1935 .. ..	*131·92	358·88	321·25	*317·55	†108·67
1936 .. ..	136·95	381·40	301·89	290·13	*118·20

\* 11 months.

† 10 months.

‡ 7 months.

*Smoke Gauges.*—The table on page 258 shows the monthly deposit of soot and ash in English tons per square mile for the years 1935 and 1936. An increase was recorded at Park Square station, but all the other stations showed slight decreases. The station with the highest monthly average was Park Square (31.78) and that with the lowest Templenewsam (10.75). The table on page 254 gives the records per annum for the years 1926-1936.

*Sunlight and Daylight Gauges.*—The table on page 259 shows the amount of daylight registered at Headingley, Park Square, York Road, Hunslet, and Middleton for the years 1935 and 1936. Decreases were recorded at all the stations. The station showing the highest monthly average was Middleton (5.53) and that with the lowest Hunslet (4.32). The table also gives the results at Garforth which is outside the city, for the last three months of 1935 and the whole of the year 1936. The monthly average at Garforth was 5.89.

From the table it will be observed that Headingley had a poorer daylight record than Park Square in certain months of the year, on the other hand the soot fall at Park Square was in every month higher than at Headingley. Generally speaking, though by no means an absolute rule, the two records ought to correspond, that is to say, where the soot fall is heavy the amount of daylight should be correspondingly low. The only explanation I can advance for the comparatively poor daylight records at Headingley is that being so near the filter beds, the site on which the gauge stands is subject to invasion by mist rising from the surface of the water. Whether this is a true explanation or not I cannot at the moment say but the matter is being investigated.

*Sulphur Pollution of the Atmosphere.*—The following table gives the estimation of atmospheric sulphur pollution by the lead peroxide method at Headingley and Park Square for the years 1935 and 1936.

# ESTIMATION OF ATMOSPHERIC SULPHUR POLLUTION BY LEAD PEROXIDE METHOD.

Weight of  $\text{SO}_3$  calculated per 100 sq. cms. of exposed fabric in milligrammes per day.

Period.	STATIONS.			
	Headingley.		Park Square.	
	1935	1936	1935	1936
January .. ..	1·613	3·17	3·194	5·35
February .. ..	2·143	2·73	3·714	4·98
March .. ..	1·742	2·60	2·935	4·23
April .. ..	1·180	1·34	2·220	2·23
May .. ..	0·610	0·77	1·320	1·88
June .. ..	1·211	0·79	2·275	1·66
July .. ..	0·753	0·86	0·945	1·82
August .. ..	0·935	1·06	1·644	1·78
September .. ..	1·362	1·22	2·630	2·07
October .. ..	2·080	1·73	3·600	3·23
November .. ..	2·610	3·76	4·010	5·44
December .. ..	2·940	2·81	4·980	4·19
Monthly Average ..	1·598	1·90	2·789	3·24

*Dust Plates.*—For the results of the analyses of samples of dust collected in various parts of Leeds, Halifax and Huddersfield, see page 219.

The analyses in connection with the smoke gauges, sunlight and daylight gauges, and sulphur pollution of the atmosphere have all been carried out by Mr. C. H. Manley, City Analyst.

The work of the smoke inspectors is given in detail in the subjoined table :—

(1)					1936.	1935.
Furnaces inspected .. .. .	..	..	..	..	1,940	1,872
Observations of chimneys .. .. .	..	..	..	..	7,447	7,074
Number of minutes of black smoke during observations .. .. .	..	..	..	..	4,164	3,621½
Average duration of black smoke per observation					33·6 secs.	31 secs.
Number of chimneys offending against the byelaw					52	50
Furnaces altered or reconstructed .. ..	..	..	..	..	49	58
Firms who have adopted smokeless fuel ..	..	..	..	..	16	23
Chimneys newly erected .. .. .	..	..	..	..	9	15
Furnaces in connection with new chimneys ..	..	..	..	..	9	15
Notices served on owners and occupiers ..	..	..	..	..	52	50
Prosecutions .. .. .	..	..	..	..	..	..

#### SMOKE OBSERVATIONS, 1922-1936.

(2)

Year.	Observations of Chimneys.	No. of Chimneys found offending against the byelaw.	Percentage.
1922	3,853	275	7·1
1923	6,007	202	3·3
1924	6,773	113	1·7
1925	4,373	92	2·1
1926	4,114	63	1·5
1927	4,185	58	1·4
1928	3,492	38	1·1
1929	3,384	77	2·3
1930	4,670	80	1·7
1931	6,397	62	1·0
1932	7,066	57	0·8
1933	6,539	67	1·0
1934	7,105	55	0·8
1935	7,074	50	0·7
1936	7,447	52	0·7

SOOT AND ASH GAUGES.  
MONTHLY DEPOSIT IN ENGLISH TONS PER SQUARE MILE.  
YEARS 1935 AND 1936.

Period.	STATIONS.											
	Headingley.		Park Square.		York Road.		Hunslet		Temple Newsam.			
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
January ..	9.46	13.15	27.51	36.95	25.45	25.22	26.72	21.88	7.70	11.19		
February ..	7.80	12.37	32.36	30.55	27.18	21.26	28.21	22.56	*	8.16		
March ..	9.31	12.95	31.01	31.06	29.43	22.90	29.27	28.05	10.33	9.05		
April ..	9.20	7.75	26.95	42.45	26.01	26.93	22.44	20.50	9.13	6.50		
May ..	8.54	11.45	17.34	23.89	23.66	25.73	33.55	25.68	7.47	11.24		
June ..	15.66	12.42	28.93	28.92	29.07	24.09	24.02	28.43	11.86	12.39		
July ..	10.00	10.88	15.95	34.49	21.11	26.43	30.07	20.47	8.77	†		
August ..	11.55	12.42	32.03	25.29	28.27	24.78	36.51	22.70	14.89	17.57		
September ..	17.87	9.08	36.72	21.47	29.66	19.35	33.68	20.55	14.81	9.10		
October ..	16.09	8.80	41.71	33.02	30.42	33.28	31.66	28.42	10.25	11.22		
November ..	16.44	13.82	33.60	36.82	26.11	25.20	21.42	21.72	13.46	11.83		
December ..	*	11.86	34.77	36.49	24.88	26.72	*	29.17	*	9.95		
Year ..	131.92 (11 months)	136.95	358.88	381.40	321.25	301.89	317.55 (11 months)	290.13	108.67 (10 months)	118.20 (11 months)		
Monthly Average ..	11.99	11.41	29.91	31.78	26.77	25.16	28.87	24.18	10.87	10.75		

† Contents lost in transit.

• Bottle cracked by Frost

TABLE SHOWING AMOUNT OF DAYLIGHT FOR THE YEARS 1935 AND 1936.  
(Value expressed as Milligrams of Iodine liberated by the action of daylight on a mixture of dilute Sulphuric Acid and Potassium Iodide Solution—Daily Average).

Period.	STATIONS.											
	Headingley.		Park Square.		York Road.		Hunslet.		Middleton.		Garforth.	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
January ..	2.06	1.95	2.60	1.61	1.82	1.74	2.16	1.46	4.55	3.02	—	2.56
February..	3.98	2.40	3.71	2.52	3.12	3.19	3.50	2.62	6.13	4.09	—	3.97
March ..	6.08	3.57	5.24	3.86	5.03	3.68	5.02	3.75	7.98	5.05	—	5.25
April ..	7.62	7.39	6.74	6.46	5.98	6.29	5.92	6.05	8.77	7.38	—	8.40
May ..	10.45	7.59	9.68	6.94	9.46	7.45	7.46	6.61	10.20	7.81	—	8.38
June ..	8.49	8.08	7.72	7.66	7.58	7.61	7.00	7.49	8.17	8.43	—	8.95
July ..	10.85	7.72	9.86	7.55	9.62	7.29	9.18	6.93	10.29	8.25	—	8.13
August ..	8.70	6.95	7.38	6.81	7.35	6.75	7.52	6.01	9.13	6.45	—	7.45
September	6.75	5.62	5.65	4.97	6.09	5.35	5.77	4.84	7.87	4.42	—	6.74
October ..	4.70	4.88	3.21	3.42	4.23	4.87	3.48	3.63	6.41	4.99	5.65	5.46
November	2.41	2.20	1.77	1.48	2.31	2.18	1.75	1.39	3.85	3.42	3.31	2.94
December	1.82	1.55	1.28	1.03	1.18	1.57	1.17	1.05	3.97	3.04	2.53	2.50
Monthly Average	6.16	4.99	5.40	4.53	5.31	4.83	4.99	4.32	7.28	5.53	—	5.89





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## Housing.

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## HOUSING.

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The year under review—1936—is the third year in the City Council's five years' programme of slum clearance and the table on page 274a sets forth the work accomplished.

Owing to the rise in building prices and the difficulty of getting builders to contract at a figure low enough to ensure the houses being let at economical rents, the programme, so far as representations were concerned, had to be suspended early in the year. The suspension was actually brought about by certain contractors whose tenders had been accepted for the building of houses on the Halton Moor Estate refusing to sign the contracts. That was in the month of October, since when no further representations have been made. Nor are they likely to be made until prices fall or a cheaper method of building is discovered. It is useless to build houses the economic rental of which must be far beyond the means of the average slum family. Food is just as essential as good housing, indeed more so, and when the choice is between food and rent, it is the latter that should suffer rather than the former. That is not generally the case, however, for when money is tight the rent has invariably the first claim while the family starves or goes on short rations. It is more important that a people should be well nourished than well housed, though both should be the aim and ideal of a progressive community. The tendency in some quarters to set the one off against the other is greatly to be deplored as the impression is thereby given that the two are mutually destructive instead of being, as they are, mutually constructive, that is to say, both are required for building up and maintaining a sound healthy race. It will be generally agreed that a bad house with plenty of food is better than a good one with insufficient. Hence the necessity of keeping rents as low as economically possible. While deploring the continued existence of so many unhealthy houses, it is better that they should remain, rather than the tenants should be rehoused at rents which they can afford only at the expense of the necessities of life.

That a way out of the present impasse will speedily be found is devoutly to be desired even if that way entails a departure from

accepted methods of construction and planning. One thing is clear, the programme must go on until it is complete and every family now living under slum conditions is given an opportunity of life on a higher and healthier standard.

**Number of Houses.**—The total number of houses in the city on December 31st, 1936, was 145,074, made up approximately of 70,954 back-to-back houses and 74,120 through houses. It will be noted that with the clearance of insanitary houses the number of back-to-back houses is slowly but steadily diminishing. Ten years ago the ratio of back-to-back to through houses was 1 to 0·53, to-day it is 1 to 1·04.

**Empty Houses.**—At the end of the year there were 3,250 unoccupied houses, mostly of the larger type in parts of the city once inhabited by well-to-do citizens and now gradually deteriorating and becoming derelict or being split up into smaller tenements.

**New Houses.**—The number of new houses completed during the year was 4,973 of which 24 were back-to-back, 632 were cottage flats, 2,360 working class houses mostly of the three bedroom type, and the remainder, 1,957 of a larger type. The total number of houses, including flats, built by the City Council since the war is 13,753, and by private enterprise 24,260.

It should again be noted that the back-to-back houses built in recent years were built in accordance with the provisions of Section 43 of the Housing and Town Planning Act, 1909, and Section 17 of the Housing Act, 1925.

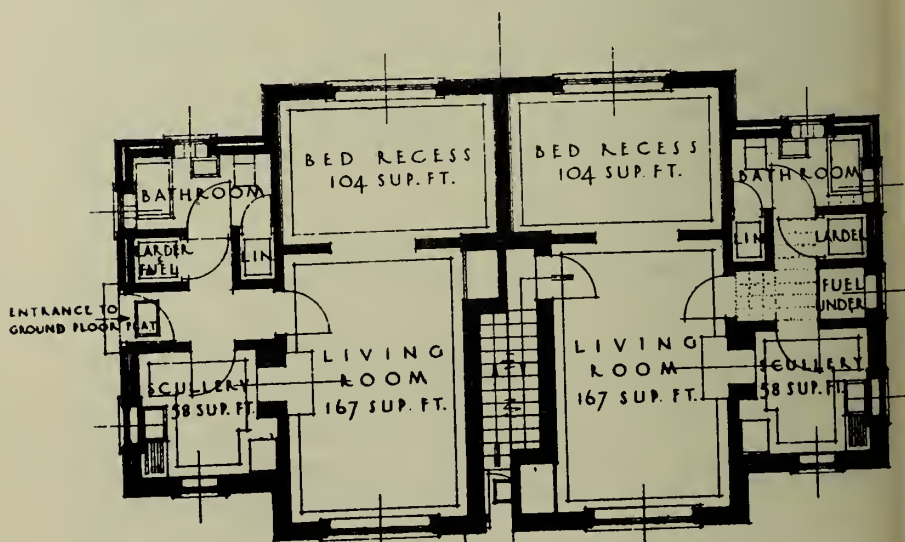
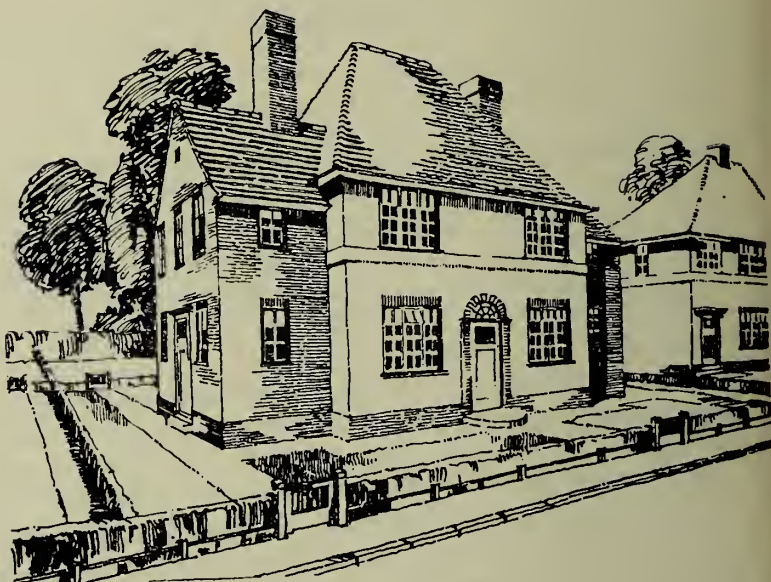
**Housing Shortage.**—The number of applications for new houses standing in the registers at the Housing Department on December 31st, 1936, was 2,780.

Application lists for the parlour type of house, and on some estates for non-parlour houses, have been open throughout the year.

**Flats.**—As a matter of interest I should like to point out that at the commencement of the Slum Clearance programme there were only 3 blocks of flats for working class people existing in Leeds, namely, Marsh Lane, Woolman Street and Shannon Street Flats.

The oldest of these and the smallest, standing in St. Ann's Square off Shannon Street in the York Road Unhealthy Area No 2, has now been demolished.

# PLAN AND ELEVATION OF A TYPICAL BLOCK OF AGEING PERSONS FLATS.



HALF GROUND FLOOR PLAN | HALF FIRST FLOOR PLAN  
1 BEDROOMED AGEING PERSONS FLATS.  
TYPE S6.

Flats do not commend themselves to the Northern mind, but the peculiar circumstances in which the city finds itself as a result of its extensive housing programme leave no option but to adopt this style of building. Within the next year or two large blocks of flats will appear on several of the sites in the central area of the city which have been cleared by the demolition of slum property. The largest block of all now in course of construction on Quarry Hill embodies many novel features and when completed will be one of the finest in the country. It will be interesting to observe the reaction of the public to this new style of housing.

*Ageing Persons Flats.*—Until the work of Slum Clearance was actually commenced, it was not generally realised that a large percentage of our population who were occupying separate dwellings consisted of single persons or elderly couples.

In the early stages of the programme no provision was made for these families, with the result that they had to be accommodated in houses of the larger type, a most uneconomic procedure.

To meet this situation a special type of flat, called the "ageing persons flat" has been designed and it is the policy of the Housing Committee to include a certain number of these on each estate.

The Corporation has been accused of inconsistency in building these small one-bedroom flats while condemning, as it does, houses with similar bedroom accommodation in slum areas. The truth is that there is no comparison between the two types of house as is amply illustrated in the specification and plan which by the courtesy of Mr. R. A. H. Livett, the Housing Director, I am able to reproduce in this report.

*Specification.*—These flats are primarily for aged persons living alone or for man and wife only, and will be limited to 2 persons; they are built in blocks of four, and each has a superficial area of 430 sq. ft. approx.

The accommodation provided is :—

Living room fitted with a built-in dresser and a back-to-back range with a bed recess opening from the living room.

Scullery with an oven as part of the back-to-back range, a gas cooker, a gas wash boiler, a sink and draining board.

Bathroom fitted with a special sitting bath, lavatory basin and W.C.

Larder, Fuel Store and Linen Cupboard.



The living room and the bed recess are separated by a heavy curtain of special material supplied as a fitting.

The back-to-back range, coal or coke fed, heats the living room and bed recess, also the scullery, provides for cooking and hot plate, as well as a supply of hot water to the sink, bath and lavatory basin.

As a supplementary method of heating the bed recess an electric fire fitted into the wall is provided.

The basic rent charged for these flats is 6/- per week, with 2/6 per week rates in addition, but this is subject to the scheme of rent differentiation now in operation.

**Overcrowding.**—As promised in my Report for 1935, I now give further details of the Overcrowding Survey undertaken in accordance with Section (1) of the Housing Act, 1935, and the explanatory Memorandum B. of the Ministry of Health.

The Survey included all houses of a working class type or of a type suitable for occupation by the working classes, with the exception of those to be dealt with in the Corporation's programme of Slum Clearance.

Form A was distributed by the Rating Department to all houses in the city deemed to be working class dwellings, with the exception of those on municipal estates, and the measurement of the houses was carried out by the sanitary inspectors. As regards houses on Corporation housing estates, Form A was issued by the Housing Department, and the measurements of the houses were taken from the deposited plans.

There are 142,145 dwellings in the city and the number dealt with in the Survey was 72,569, or 51.0 per cent.—64.7 per cent. after the exclusion of the 30,000 slum houses. The survey revealed that there are 2,345 overcrowded houses, a percentage of 3.27 for the city as a whole, while on the municipal housing estates there are 605 overcrowded houses a percentage of 5.35. In view of the exclusion from the Survey of the houses in Unhealthy Areas, numbering approximately 30,000, many of which are known to be overcrowded, it is obvious that the overcrowding figure of 3.27 per cent. for the city as a whole is understated, though to what extent one can only speculate. That the extent is material, however, may be assumed from the overcrowding figure got out on the standard of the 1935 Act for 6,112 houses condemned and since demolished or now awaiting demolition which was 8.5 per cent. On the assumption that this degree of overcrowding prevails throughout

the whole of the 30,000 houses, the overcrowding figure for the city as a whole would be somewhere in the region of 5.0 per cent. On a sex basis the degree of overcrowding was surprisingly small, not more than two houses out of the total surveyed.

I desire to draw particular attention to the table on page 274, in which a comparison is drawn between the overcrowding on the Government Standard and that on the Local Standard, the implication being that as far as Leeds is concerned the provisions of the Housing Act, 1935, will not entirely solve the problem.

In Leeds it is well known that only on the rarest occasion is the living-room in a working-class dwelling used for sleeping purposes, and there is no reason to believe that this practice will be varied in the future. The effect will be that a number of houses will still continue to be overcrowded both on a numerical and a sex standard, with the apparent condonation of the Local Authority, whose responsibility it will be to fix the number of occupants for any particular dwelling.

	Dwellings Privately owned.	Dwellings on Municipal Estates.
A. (1) No. of dwellings overcrowded at the end of the year .. ..	1,802	562
(2) No. of families dwelling therein ..	1,802	562
(3) No. of persons dwelling therein ..	10,155	4,130½
B. No. of new cases of overcrowding reported during the year ..	150	85
C. (1) No. of cases of overcrowding relieved during the year.. ..	14	128
(2) No. of persons concerned in such cases .. .. .	78	934
D. Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding	None	None

"Persons" means "Units" under the Act.

*Extension of the Survey.*—As already mentioned the number of houses originally included in the Survey was 72,569; subsequently, however, it was decided to obtain information regarding the 30,000 houses included in the Corporation's Slum Clearance programme, and the sanitary inspectors have been engaged during the latter part of the year on this work. The Survey of 4,205 houses had been completed by December 31st and the work is still proceeding.

In addition, particulars regarding a further 4,303 houses had been obtained by the Housing Department from deposited plans.

At the end of the year the total number of houses surveyed was 81,077.

It is most regretable that the Survey of all the working class houses in the city including the 30,000 slum houses could not have been completed at one time, as the splitting up of the work into two sections has seriously disorganised the work of the Department.

**Verminous Houses.**—The disinfestation of all furniture removed from condemned houses on the slum clearance areas has continued during the year. The HCN. process continues to give very satisfactory results.

During the early part of the current year, the number of houses proved too great for the capacity of the station, and additional outside help had to be enlisted.

The disinfestation of houses on the municipal housing estates has been undertaken by outside contractors on behalf of the Housing Department.

Particulars of the number of houses dealt with at the disinfestation station are given in the table on page 50.

**Unfit Houses.**—The number of houses inspected and found not to be in all respects reasonably fit for human habitation was 118, of which 76 were repaired in response to notices served under Section 17 of the Housing Act, 1930, now Section 9 of the Housing Act, 1936.

In addition 14,695 houses were found to be defective in one respect or another and were repaired.

During the year, 38 houses were represented as "individual unfit houses" under Sections 19, 20 and 21 of the Housing Act, 1930. In respect of 16 of these Demolition Orders were made, while in the remainder undertakings were accepted from the owners that the houses would not again be let or used for human habitation.

A further 54 houses because of their dangerous condition were demolished in anticipation of formal proceedings.

**Unhealthy Areas.**—During the year, which is the third year of the Council's slum clearance programme, one unhealthy area was represented involving 1,088 houses and a population of 3,408 persons. Particulars of the area are set out in detail in the table on page 270.

In the same period three Public Inquiries were held, the first on January 29th into :—

Spence Lane Areas	}	997 houses.
Copley Hill Area		
Gelderd Road, Whitehall Road and Wortley Lane Areas		
Domestic Street Areas		
Canal Wharf Areas		

the second on May 12th into :—

Reservoir Street Areas	}	1,005 houses.
Woodhouse Areas		
Meanwood Road Areas		
Maude Street and Barkers Yard Areas		
Chadwick Court Area		
Salem Place Area		
Grey Walk Areas		
Orchella Place Area		
Kirks' Yard Area		
Lees' Yard Area		
Kirkgate Area		
Talavera Street Areas		
Belfort Court Area		

and the third on November 3rd into :—

Kirkstall Road (Central) Areas .. 1,088 houses.

The first Inquiry occupied a period of eight days and the second and third a period of six days each.

Confirming Orders for 23 Areas were received during the year, particulars of which are set out in the table on page 274a.

*Demolition.*—As a result of the increased delivery of new houses on the Housing Estates, it has been possible to augment the staff of workmen engaged in the demolition of condemned houses in the unhealthy areas, with the result that the number of houses actually demolished in those areas during the year was 1,284. This is the largest number demolished in one year since the inception of the programme.

A further 268 houses of a similar class were demolished in anticipation of their condemnation.

The total number of houses demolished during the year was therefore 1,552.

**Visit of the Minister of Health.**—Sir Kingsley Wood, P.C., the Minister of Health, visited Leeds in January in connection with his tour of the country in support of the national housing campaign.

OFFICIAL REPRESENTATIONS MADE IN THE THIRD YEAR OF THE CORPORATION'S  
PROGRAMME UNDER SECTION 1 OF THE HOUSING ACT, 1930, WITH DETAILS  
OF HOUSES, POPULATION AND DATES OF REPRESENTATION.

Area.	Scheme.	Number of Houses.	Other Build- ings.	Popula- tion.	Date of Representation.
Kirkstall Road (Central)	Compulsory Purchase	1,088	3	3,408	January 8th, 1936.
Individual Unfit Houses	Under Housing Act, 1930, Section 19	38	—	113	Jan. to Dec., 1936.
	GRAND TOTALS . .	1,126	3	3,521	

TABLE SHEWING THE NUMBER OF HOUSES ERECTED IN LEEDS  
DURING THE LAST THIRTY-FIVE YEARS, ENDED 31st MARCH, 1937.

Year.	By Private Enterprise.	By Leeds City Council.	Total.
1903 .. ..	2,572	..	2,572
1904 .. ..	2,923	..	2,923
1905 .. ..	2,442	..	2,442
1906 .. ..	1,748	..	1,748
1907 .. ..	1,135	..	1,135
1908 .. ..	919	..	919
1909 .. ..	836	..	836
1910 .. ..	584	..	584
1911 .. ..	505	..	505
1912 .. ..	350	..	350
1913 .. ..	220	..	220
1914 .. ..	287	..	287
1915 .. ..	228	..	228
1916 .. ..	146	..	146
1917 .. ..	51	..	51
1918 .. ..	5	..	5
1919 .. ..	4	..	4
1920 .. ..	7	..	7
1921 .. ..	104	92	196
1922 .. ..	118	930	1,048
1923 .. ..	108	1,810	1,918
1924 .. ..	354	264	618
1925 .. ..	593	358	951
1926 .. ..	1,044	332	1,376
1927 .. ..	1,522	856	2,378
1928 .. ..	1,553	830	2,383
1929 .. ..	1,254	618	1,872
1930 .. ..	1,696	976	2,672
1931 .. ..	913	738	1,651
1932 .. ..	1,439	1,195	2,634
1933 .. ..	1,758	689	2,447
1934 .. ..	2,990	710	3,700
1935 .. ..	3,180	854	4,034
1936 .. ..	3,211	670	3,881
1937 .. ..	3,166	2,379	5,545
Totals .. ..	39,965	14,301	54,266



TABLE SHEWING THE TOTAL AMOUNT OF HOUSING WORK DONE  
BY THE LEEDS CITY COUNCIL TO 31ST MARCH, 1937.  
ASSISTED SCHEMES. (1919 ACT).

NAME OF ESTATE.	Sewers laid.  Length in yds.	Roads formed, pitched or concreted and ashed.  Length in yds.	No. of Houses, Flats and Shops for which Contracts have been signed.	No. of Houses Flats and Shops com- pleted.	No. of Houses, Flats and Shops on which work has been com- menced (including those in previous column).
Hawthornth Wood ..	4,436	5,109	402	402	402
Wyther House ..	3,857	4,048	492	492	492
Meanwood .. ..	4,394	5,931	800	800	800
Demonstration Houses, Meanwood .. ..	included	above.	6	6	6
Crossgates .. ..	4,510	6,063	488	488	488
Middleton .. ..	4,239	5,477	697	697	697
Ivy House .. ..	Existing	Existing	46	46	46
Section 12/3 Houses	do.	do.	398	398	398
Halton .. ..	do.	do.	118	118	118
Totals .. ..	21,436	26,628	3,447	3,447	3,447

OTHER THAN ASSISTED SCHEMES  
(including 1923, 1924 1925, and 1930 Acts).

Wyther House ..	1,058	1,595	184	184	184
Meanwood .. ..	3,387	3,761	584	584	584
Crossgates .. ..	included	in A.S.	176	176	176
Middleton .. ..	10,492	11,662	2,035	2,035	2,035
Hollin Park .. ..	2,647	2,396	345	345	345
York Road .. ..	8,470	10,659	1,929	1,929	1,929
Harehills .. ..	690	868	112	112	112
Hawthornth .. ..	1,426	1,981	510	462	510
Greenthorne .. ..	1,161	1,290	216	216	216
Southfield .. ..	465	539	98	98	98
Dewsbury Road ..	2,635	2,817	616	616	616
Westfield .. ..	4,038	3,796	686	544	658
Potternewton ..	2,783	3,212	720	720	720
East End Park (pur- chased for re-housing)	Existing	Existing	192	192	192
Sandford House ..	4,005	4,468	1,070	304	484
Torre .. ..	1,963	2,502	524	524	524
Hillidge Road ..	44	66	32	32	32
Gipton .. ..	20,446	24,202	3,500	1,724	3,420
Quarry Hill .. ..	2,505	2,070	954	..	491
Belle Isle .. ..	5,566	6,339	1,090	115	344
Brianside—Seacroft	1,072	..	182	..	80
Halton Moor .. ..	4,985	4,487	..	..	..
Halton .. ..	Existing	Existing	22	22	22
Totals .. ..	79,738	88,710	15,777	10,994	13,772
Grand Totals ..	101,174	115,338	†19,224	†14,441	17,219

† Includes 3,712 Cottage Flats and 938 Flats.

‡ Includes 2,508 Cottage Flats completed.

The above figures include Shops and Practitioners' Houses.

Since 1st April, 1928, the Halton Housing Estate comprising 140 Houses has been taken over by the Leeds City Council and is incorporated in the above statements.

### HOUSING ACT, 1930.

Table shewing the number of houses examined by the Medical Officer of Health as part of the general survey of the town during the year ending December 31st, 1936, and the numbers represented or otherwise dealt with, pursuant to the Housing Acts, with the corresponding figures for 1934 and 1935.

	1934.	1935.	1936.
Number of new houses erected during the year ..	4,169	4,203	4,973
(i) By the Local Authority .. ..	888	726	2,019
(ii) By other bodies and persons .. ..	3,281	3,477	2,954
1. <i>Inspection of dwelling-houses during the year.</i>			
(1) Total number of dwelling-houses inspected for housing defects under Public Health or Housing Acts and the number of inspections made .. ..	21,243	17,713	14,695
(2) Number of dwelling-houses (included under Sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925, and the number of inspections made .. ..	75	163	122
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation .. ..	4,516	3,275	1,126
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation .. ..	652	670	118
2. <i>Remedy of Defects during the year without Service of Formal Notices.</i>			
Number of defective dwelling-houses rendered fit in consequence of informal action taken by the Local Authority or their Officers .. ..	469	423	37
3. <i>Action under Statutory Powers during the year.</i>			
A.—Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930.			
(1) Number of dwelling-houses in respect of which notices were served requiring repairs ..	154	218	97
(2) Number of dwelling-houses which were rendered fit after service of Formal Notices :—			
(a) By owners .. ..	144	87	39
(b) By Local Authority in default of owners ..	..	..	..
B.—Proceedings under the Public Health Acts.			
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied .. ..	22,241	22,236	18,763
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—			
(a) By owners .. ..	20,627	21,055	16,994
(b) By Local Authority in default of owners ..	..	..	..
C.—Proceedings under Sections 19, 20 and 21 of the Housing Act, 1930.			
(1) Number of dwelling-houses in respect of which Demolition or Closing Orders were made ..	12	45	16
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders .. ..	18	3	6

# HOUSING ACT, 1935 (OVERCROWDING). COMPARISON BETWEEN GOVERNMENT STANDARD AND LOCAL STANDARD.

The Local Standard is in detail the same as laid down in Tables I. and II. of the Act with two exceptions, (1) no account is taken of the living room for sleeping purposes; (2) the separation of children of opposite sexes when a child reaches the age of 10 years.

The result of the application of the Local Standard shows 13,571 houses overcrowded owing to excess of numbers and 1,556 houses overcrowded in respect of sex separation, making a total of 15,127 houses overcrowded or 21·13 per cent.

It will be noted that only two cases of overcrowding caused by sex separation occur under the standard laid down by the Act, while under the Local Standard 1,556 cases of overcrowding arise owing to sex separation.

The table below shows a comparison of the result of the application of the two standards.

Arranged according to:—	HOUSING ACT, 1935—GOVERNMENT STANDARD.				LOCAL STANDARD.			
	Total number of houses.	Overcrowded.		Percentage overcrowded.	Total number of houses.	Overcrowded.		Percentage overcrowded.
		Excess No. of Persons	Sex.			Excess No. of Persons	Sex.	
All houses other than those classified below ..	59,454	1,686	2	2·88	59,454	9,986	1,084	18·62
Municipal Housing Estates ..	11,298	605	..	5·35	11,298	3,266	439	32·79
Privately owned on Municipal Housing Estates ..	290	3	..	1·03	290	25	17	14·48
Trust Houses ..	543	55	..	10·13	543	294	16	57·09
TOTAL ..	71,585	2,343	2	3·27	71,585	13,571	1,556	21·13
		2,345				15,127		

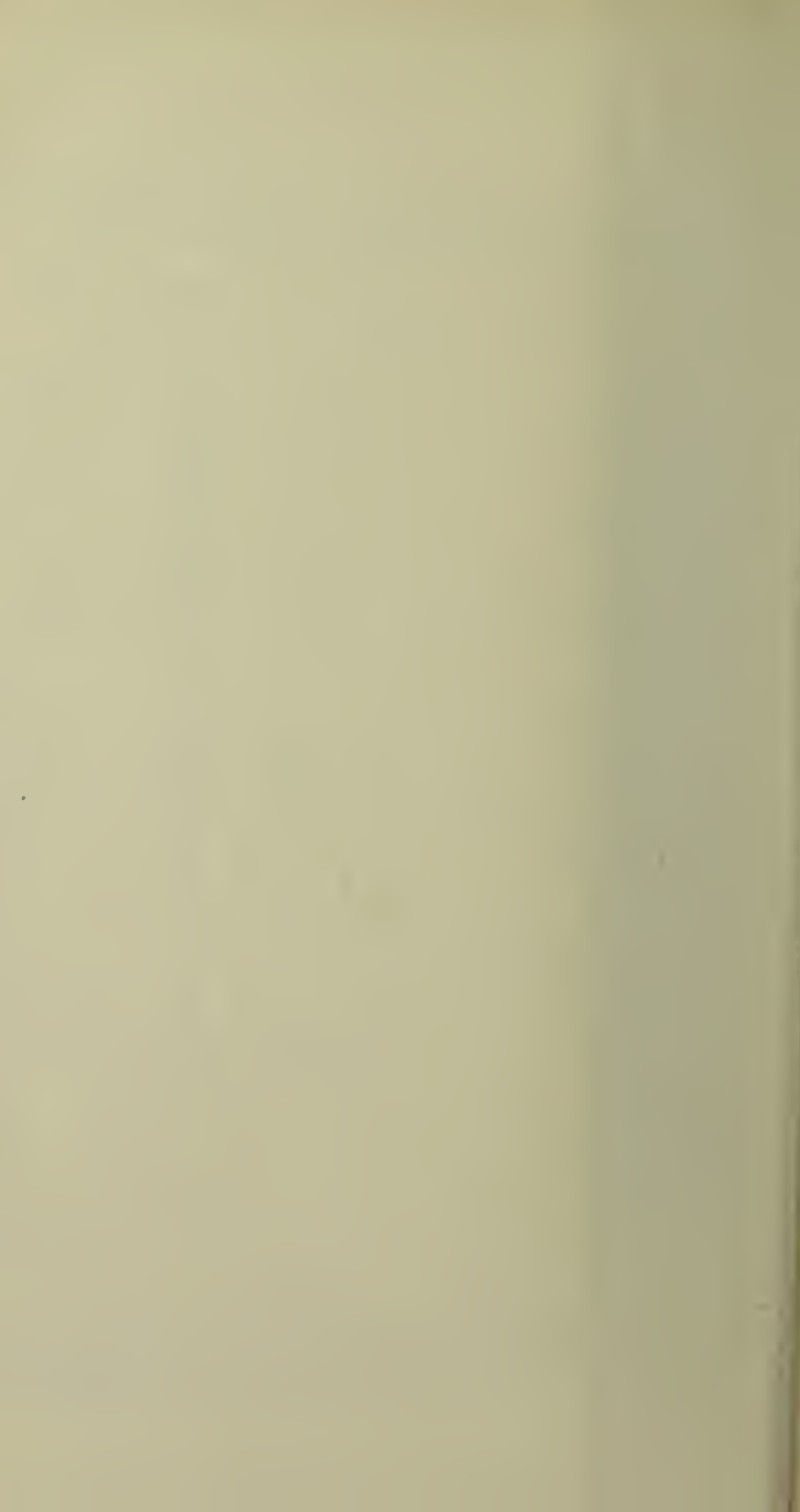
## CITY OF LEEDS.

TABLE SHOWING THE PROGRESS OF THE SLUM CLEARANCE WORK UNDER THE FIVE YEARS' PROGRAMME ADOPTED BY THE CITY COUNCIL.

AREA.	Date of Representation.	No. of Houses		Popula- tion.	Date of Inquiry.	Date when Order Confirmed.	RESULTS.						No. of houses Demolished.
		Pink.	Grey.				Pink.		Pink to Grey.		Excluded †		
							Houses.	Other Buildings.	Houses.	Other Buildings.	Houses.	Other Buildings.	
West Street .. .. .	3/9/31	222	6	716	6/10/32	11/3/33	222	—	—	—	—	2	222
Cavalier Street .. .. .	19/1/33	103	—	381	9/5/33	25/7/33	103	1	—	—	—	—	103
Woodhouse Street .. .. .	"	83	—	276	"	"	83	3	—	—	—	—	83
Meadow Lane .. .. .	"	229	1	981	"	2/10/33	209	20	1	—	19	1	208
Newtown .. .. .	15/2/33	245	4	879	10/10/33	2/3/34	242	6	3	6	—	—	232
Isle Lane .. .. .	"	229	—	894	"	21/2/34	220	32	3	—	6	—	223
Albion Terrace .. .. .	"	62	—	203	"	16/2/34	56	6	—	—	6	2	59
Bell's Buildings .. .. .	"	41	—	156	"	"	41	1	—	—	—	—	41
York Road .. .. .	24/4/33	603	8	2,301	"	5/3/34	581	28	9	2	13	23	552
Bleazard Fold .. .. .	19/1/33	7	—	28	—	6/7/34	7	—	—	—	—	—	7
Marsh Lane .. .. .	7/2/34	1,214	7	4,352	27/6/34	22/12/34	1,174	62	27	10	13	2	89
Marlborough Street and Little Queen Street .. .. .	19/4/34	871	4	2,999	24/10/34	18/5/35	813	26	41	22	17	3	206
Camp Field .. .. .	13/6/34	141	—	532	22/1/35	16/9/35	133	—	—	—	8	—	—
Land Court .. .. .	"	47	—	139	"	"	39	4	—	1	8	—	33
Water Lane .. .. .	"	136	—	500	"	"	126	2	—	4	10	2	99
Hunslet Hall Road .. .. .	"	44	—	113	"	"	44	13	—	1	—	—	43
Cottage Street .. .. .	"	109	—	368	"	"	107	2	—	1	2	—	—
Cromwell Street .. .. .	"	622	6	2,133	"	"	582	8	37	6	3	1	—
Sweet Street .. .. .	21/12/34	1,069	139	4,119	2/5/35	24/9/35	1,049	38	20	12	—	—	24
Regent Street .. .. .	"	268	2	811	"	"	268	8	—	1	—	—	112
South Accommodation Road .. .. .	11/3/35	322	21	1,288	22/10/35	25/5/36	301	—	13	—	8	—	—
Ellerby Lane .. .. .	"	773	47	2,626	"	"	746	13	10	—	17	—	—
Pontefract Lane .. .. .	"	86	—	225	"	"	83	—	—	—	3	—	—
Long Close Lane .. .. .	"	33	—	107	"	"	33	—	—	—	—	—	—
Hampton Street .. .. .	"	33	—	100	"	"	31	—	—	—	2	—	—
Copley Hill .. .. .	19/6/35	20	—	64	28/1/36	26/9/36	20	—	—	—	—	—	—
Spence Lane .. .. .	"	128	—	397	"	"	127	3	1	—	—	—	—
Gelderd Road, Whitehall Road and Wortley Lane .. .. .	"	471	—	1,305	"	"	470	24	—	—	1	1	—
Domestic Street .. .. .	"	353	5	1,106	"	"	346	7	6	—	1	—	—
Reservoir Street .. .. .	"	86	—	228	12/5/36	10/11/36	84	6	—	—	2	2	—
Woodhouse .. .. .	"	392	24	1,162	"	"	369	17	15	—	8	1	—
Meanwood Road .. .. .	"	352	—	1,045	"	"	329	8	4	—	8	—	—
Canal Wharf .. .. .	19/7/35	25	—	81	28/1/36	26/9/36	21	—	—	—	—	—	—
Orchella Place .. .. .	15/10/35	11	—	24	12/5/36	22/8/36	11	—	—	—	—	—	—
Salem Place .. .. .	"	14	—	47	"	10/11/36	13	—	—	—	—	—	—
Kirkgate .. .. .	"	26	—	65	"	"	9	—	—	—	16	—	—
Belfort Court.. .. .	"	23	—	51	"	"	23	—	—	—	—	—	—
Talavera Street .. .. .	"	18	—	60	"	"	12	—	—	—	6	—	—
Kirk's Yard .. .. .	"	5	—	17	"	"	4	—	1	—	—	—	—
Grey Walk .. .. .	"	12	—	36	"	22/8/36	12	—	—	—	—	—	—
Chadwick Court .. .. .	"	15	—	37	"	10/11/36	15	—	—	—	—	—	—
Maude Street and Barker's Yard.. .. .	"	11	—	48	"	"	11	—	—	—	—	—	—
Lee's Yard .. .. .	"	15	—	37	"	"	15	—	—	—	—	—	—
Kirkstall Road (Central) .. .. .	8/1/36	1,088	237	4,116	3/11/36	"	"	—	—	—	—	—	—
Ellerby Lane No. 3 (part).. .. .	11/3/35	3	—	9	—	18/9/36	3	—	—	—	—	—	—
Talavera Street No. 2.. .. .	15/10/35	6	—	19	—	—	6	—	—	—	—	—	—
Gelderd Road No. 1a .. .. .	19/6/35	1	—	3	—	—	1	—	—	—	—	—	—
Meanwood Road No. 8 .. .. .	"	5	—	20	—	—	5	—	—	—	—	—	—

† Most of the houses shown in "excluded" column were on undertakings given by the Owners or so dealt with by the Ministry on the understanding that the City Council should take further action under Part II. of the Housing Act.





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**Health Education  
and Propaganda.**

**Staff Changes.**

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## HEALTH EDUCATION AND PROPAGANDA.

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As in previous years the Leeds Committee for Social Hygiene and Health Publicity has undertaken the responsibilities for the publicity side of the Health Committee's activities. For this service, freely and generously given by the Chairman and Members of the Committee, the Health Committee is extremely grateful.

A most successful Health Week was held in October; 288 lectures and addresses were given, of which 92 were illustrated by films. The audiences numbered 97,914, or nearly one-fifth of the population of the city. By the kind permission of the Director of Education 78 displays of films suitable for children were given in the schools during the week. A lesson on a subject of health was given to each class by its teacher.

Interesting and provocative addresses were given to parents by Miss V. D. Swaisland, B.Sc., of the British Social Hygiene Council at one of the Leeds Girls' Secondary Schools.

Apart from Health Week the number of lectures and addresses given numbered 33 of which 10 were illustrated by films. The total attendances were 1,531. In connection with the meetings 1,150 books and pamphlets were distributed.

Among those who gave their services as lecturers were the Rt. Hon. Arthur Greenwood, P.C., M.P., Sir Henry Brackenbury, LL.D., M.D., and Dr. C. C. McGonigle, Medical Officer of Health of Stockton-on-Tees.

*Wayside Pulpits.*—The display of suitable slogans on the eleven wayside pulpits was an important feature of health propaganda.

*Press.*—We have cause to be especially grateful for the continued good offices of the Press of the city, who have been a never failing source of help.

## STAFF CHANGES.

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G. F. Barran, B.A., M.R.C.S., L.R.C.P., M.B., B.Chir., appointed Senior Assistant Resident Medical Officer at Killingbeck Sanatorium, January, 1936, in place of H. J. Partington, M.B., Ch.B., M.R.C.S., L.R.C.P., resigned November, 1935.

H. B. Pope, M.A., M.R.C.S., L.R.C.P., appointed Public Vaccinator for No. 7 Vaccination District, February, 1936, in place of F. W. M. Greaves, M.B., Ch.B., D.P.H., deceased.

J. H. Way, M.R.C.S., L.R.C.P., appointed Public Vaccinator for No. 14 Vaccination District, February, 1936, in place of W. Way, M.R.C.S., L.R.C.P., deceased.

H. B. Pope, M.A., M.R.C.S., L.R.C.P., appointed District Medical Officer for No. 7 Medical Relief District for a period of six months, February, 1936, and in November, 1936, appointed for a further period of six months.

J. H. Way, M.R.C.S., L.R.C.P., appointed District Medical Officer for No. 14 Medical Relief District for a period of six months February, 1936, and in November appointed for a further period of six months.

H. Agar, B.Sc., M.B., B.S., F.R.C.S., appointed Resident Surgical Officer at St. James's Hospital, June, 1936.

Ian Macpherson, M.B., Ch.B., appointed Resident Medical Officer at St. James's Hospital, June, 1936.

D. J. Williams, appointed Steward at Seacroft Hospital, September 1936, in place of R. Grist, resigned September, 1936.

J. F. Warin, M.B., Ch.B., D.P.H., appointed Junior Resident Medical Officer at Killingbeck Sanatorium, September, 1936, in place of J. Fielding, M.D., M.B., Ch.B., D.P.H., resigned.

F. H. B. Fuller, M.B., Ch.B., appointed Resident Medical Officer at St. Mary's Infirmary, September, 1936, in place of Anne M. Forrest, M.B., Ch.B., D.P.H.



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## Appendices.

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# APPENDIX 1.

## MINISTRY OF HEALTH TABLES. TABLE I.

### VITAL STATISTICS OF WHOLE DISTRICT DURING 1936 AND PREVIOUS YEARS.

Year.	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.				
		Un- corrected Number.	Nett.	Number.	Rate.	Of Non- residents registered in the District.	Of Resi- dents not registered in the District.	Under 1 Year of Age.		At all Ages.		
								Number.	Rate.	Number.	Rate per 1,000 Nett Births.	Number.
1	2	3	4	5	6	7	8	9	10	11	12	13
1926	473,400	8,437	8,065	17.0	6,285	13.3	531	308	748	93	6,062	12.8
1927	477,600	8,075	7,790	16.3	6,438	13.5	578	338	629	81	6,198	13.0
1928	474,800*	7,978	7,665	16.1	6,419	13.5	545	259	606	79	6,133	12.9
1929	478,500	7,725	7,426	15.5	8,289	17.3	657	266	722	97	7,898	16.5
1930	478,500	7,905	7,568	15.8	6,235	13.0	544	239	512	68	5,930	12.4
1931	486,400	7,557	7,219	14.8	6,810	14.0	553	249	552	76	6,506	13.4
1932	484,900	7,368	7,004	14.4	6,771	14.0	550	248	617	88	6,469	13.3
1933	485,000	7,070	6,643	13.7	6,851	14.1	538	261	537	81	6,574	13.6
1934	486,250	7,691	7,190	14.8	6,666	13.7	619	244	513	71	6,291	12.9
1935	487,200	7,751	7,211	14.8	6,763	13.9	576	245	463	64	6,432	13.2
1936	489,800	7,845	7,340	15.0	7,003	14.3	620	283	476	65	6,666	13.6

Area of District in }  
acres (land and } 38,105  
inland water)

Total population at all ages at the 1931 Census 482,809

\* Population adjusted to allow for change in boundary during the year. The mid-year population after the change is 476,500.

TABLE II. CASES OF INFECTIOUS DISEASES NOTIFIED DURING THE CALENDAR YEAR 1936

## APPENDIX 2.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.							Total Cases removed to Hospital.
	At all Ages.	At Ages—Years.						
		Under 1.	1 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	
Small-pox .. .. .	..	..	..	..	..	..	..	..
Cholera (C.) Plague (P.) ..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous Croup)	799	27	161	410	132	60	9	784
Erysipelas .. .. .	291	8	2	11	18	82	117	151
Scarlet Fever.. .. .	1,868	3	371	1,087	244	146	17	1,718
Measles .. .. .	8,744	465	4,848	3,349	57	23	2	134
German Measles .. .. .	427	18	156	216	26	9	2	1
Typhus Fever .. .. .	..	..	..	..	..	..	..	..
Enteric Fever .. .. .	4	..	1	2	1	..	..	3
Relapsing Fever (R.) Continued Fever (C.)	..	..	..	..	..	..	..	..
Puerperal Fever .. .. .	76	..	..	..	26	50	..	8
Puerperal Pyrexia .. .. .	107	..	..	..	42	64	1	1
Cerebro-Spinal Meningitis ..	21	1	3	6	4	2	5	3
Poliomyelitis .. .. .	6	1	2	2	1	..	..	..
Opthalmia Neonatorum .. ..	59	59	..	..	..	..	..	..
Encephalitis Lethargica .. ..	..	..	..	..	..	..	..	..
Malaria .. .. .	..	..	..	..	..	..	..	..
Dysentery .. .. .	..	..	..	..	..	..	..	..
Other Diseases .. .. .	366	23	85	133	80	28	9	361
Pulmonary Tuberculosis .. ..	531	..	11	55	129	182	133	371
Other forms of Tuberculosis ..	163	4	28	63	24	29	14	22
Pneumonia (Acute Primary) ..	645	35	127	124	61	142	96	3
"    (Acute Influenzal) .. ..	91	3	6	7	8	32	30	..
TOTALS .. .. .	14,198	647	5,801	5,465	853	849	435	3,560

Isolation Hospital or Hospitals, Sanatoria, &amp;c.:—City Fever Hospital, Seacroft and Killingbeck.

In addition to the 371 Pulmonary Tuberculosis and 22 Tuberculosis (Other Forms), removed, 63 Pulmonary Tuberculosis and 5 Tuberculosis (Other Forms), were admitted to "The Hollies," Westwood Lane, and 74 Pulmonary Tuberculosis were admitted to Gateforth Sanatorium which is outside the City. They are included in the 531 and 163 notified.



TABLE II. (continued).

TOTAL CASES NOTIFIED IN EACH LOCALITY, (e.g., Parish or Ward) of the District.																												
NOTIFIABLE DISEASE.		Mill Hill and South.	Westfield.	Blenheim.	Central.	Woodhouse.	North.	Far Headingley.	Hyde Park.	Kirkstall.	Burmantofts.	Harehills.	Potternewton.	Roundhay.	Cross Gates and Templenewham.	Richmond Hill.	Osmondthorpe.	East Hunslet.	Hunslet Carr and Middleton.	West Hunslet.	Beeston.	Holbeck (South).	Holbeck (North).	Armley and New Wortley.	Upper Armley.	Bramley.	Farley and Wortley.	City.
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera (C) Plague (P)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous Croup) ..	..	53	63	42	14	21	9	16	19	35	67	36	22	18	19	27	49	28	40	22	30	15	42	39	25	14	34	799
Erysipelas ..	..	16	8	15	13	7	15	11	11	12	37	11	14	4	6	6	14	11	11	10	11	8	5	5	10	5	15	291
Scarlet Fever..	..	65	47	67	68	54	88	66	33	68	71	77	75	67	109	49	97	90	189	92	73	59	46	70	34	37	77	1,868
Measles ..	..	279	221	208	456	376	280	245	161	239	529	376	246	195	263	509	536	320	609	309	233	253	273	343	273	465	457	8,744
German Measles ..	..	8	12	8	9	9	15	27	9	51	7	9	23	20	9	11	6	21	17	34	53	20	18	5	15	7	4	427
Typhus Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever ..	..	1	..	..	1	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Relapsing fever (R) Continued fever (C) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever ..	..	..	..	57	1	..	2	..	..	..	5	..	1	..	..	3	1	1	..	..	..	..	..	1	1	1	1	76
Puerperal Pyrexia ..	..	1	..	52	1	..	..	..	..	..	32	2	1	..	..	..	2	2	..	..	..	..	..	..	13	1	..	107
Cerebro-Spinal Meningitis ..	..	..	..	1	..	..	1	..	..	..	15	..	..	..	..	..	1	2	..	..	..	..	..	..	..	..	..	21
Poliomyelitis ..	..	..	..	..	..	..	..	..	..	..	3	..	..	2	..	..	..	..	1	2	..	..	..	..	..	..	..	6
Ophthalmia Neonatorum ..	..	2	2	26	1	1	..	..	1	1	4	1	4	2	..	4	1	1	..	2	..	..	1	2	3	..	..	59
Encephalitis Lethargica ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malaria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dysentery ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases ..	..	33	12	34	12	10	6	12	7	12	22	11	9	16	31	8	10	16	16	14	8	17	9	7	21	5	8	366
Pulmonary Tuberculosis ..	..	14	29	18	33	18	21	15	13	27	32	27	17	9	12	32	31	23	31	19	10	19	19	17	14	7	24	531
Other Forms of Tuberculosis ..	..	3	3	7	9	8	6	2	3	7	8	6	8	7	8	9	7	6	12	5	5	6	5	9	6	5	3	163
Pneumonia (Acute primary)	..	37	40	15	22	42	24	17	6	30	35	16	16	9	12	45	34	33	27	14	10	11	26	31	21	35	37	645
Do. (Acute Influenzal)	..	8	..	..	3	..	2	4	2	4	11	7	4	3	4	5	7	..	3	3	3	2	1	3	2	2	8	91
TOTALS ..	..	512	445	640	643	546	469	416	265	487	878	579	440	354	473	708	796	554	958	522	436	410	445	532	438	584	668	14,198

## APPENDIX 3.

### CAUSES OF, AND AGES AT DEATH DURING THE CALENDAR YEAR 1936.

### REGISTRAR GENERAL'S FIGURES.

CAUSES OF DEATH.	Sex.	All Ages.	0-	1-	2-	5-	15-	25-	35-	45-	55-	65-	75-
All Causes .. ..	M.	3,437	278	45	37	54	90	146	179	406	742	862	598
	F.	3,229	197	39	53	56	97	138	165	303	538	836	807
1. Typhoid and Para-typhoid Fevers .. ..	M.	..	..	..	..	..	..	..	..	..	..	..	..
	F.	..	..	..	..	..	..	..	..	..	..	..	..
2. Measles .. ..	M.	24	12	11	1	..	..	..	..	..	..	..	..
	F.	24	2	12	10	..	..	..	..	..	..	..	..
3. Scarlet Fever .. ..	M.	4	..	1	1	2	..	..	..	..	..	..	..
	F.	8	1	..	1	4	2	..	..	..	..	..	..
4. Whooping Cough .. ..	M.	11	8	3	..	..	..	..	..	..	..	..	..
	F.	18	10	5	3	..	..	..	..	..	..	..	..
5. Diphtheria .. ..	M.	17	3	1	5	6	..	1	..	1	..	..	..
	F.	18	1	1	7	7	2	..	..	..	..	..	..
6. Influenza .. ..	M.	25	1	..	..	..	..	1	2	2	6	7	6
	F.	38	..	..	..	..	..	2	2	8	5	9	12
7. Encephalitis Lethargica .. ..	M.	6	..	..	..	..	..	4	1	..	..	..	1
	F.	4	..	..	..	..	..	1	2	..	1	..	..
8. Cerebro-spinal Fever .. ..	M.	12	3	2	1	1	2	1	..	1	1	..	..
	F.	8	1	..	3	2	..	..	..	1	1	..	..
9. Tuberculosis of respiratory system .. ..	M.	226	1	2	..	..	19	45	37	67	37	18	..
	F.	121	..	2	..	2	34	27	23	14	11	8	..
10. Other Tuberculous Diseases .. ..	M.	34	2	1	7	3	7	1	5	2	6	..	..
	F.	28	2	1	3	5	6	5	1	3	2	..	..
11. Syphilis .. ..	M.	11	4	..	..	..	..	..	2	1	..	3	1
	F.	9	1	..	..	..	..	..	2	5	1	..	..
12. General Paralysis of the insane—tabes dorsalis .. ..	M.	18	..	..	..	..	..	1	2	7	3	2	3
	F.	6	..	..	..	..	..	1	..	3	2	..	..
13. Cancer, malignant disease .. ..	M.	421	..	..	..	..	7	15	57	130	152	60	..
	F.	422	..	..	1	3	11	34	80	117	113	63	..
14. Diabetes .. ..	M.	39	..	..	..	1	3	2	..	12	14	7	..
	F.	62	..	..	..	..	..	1	2	26	22	11	..
15. Cerebral Hæmorrhage, &c. .. ..	M.	171	..	..	..	2	1	6	12	43	66	41	..
	F.	240	..	..	..	..	2	3	14	57	97	67	..
16. Heart Disease .. ..	M.	887	..	..	..	7	15	17	29	87	215	284	233
	F.	835	..	1	..	2	13	23	26	66	129	279	296
17. Aneurysm .. ..	M.	22	..	..	..	..	1	..	1	5	4	8	3
	F.	11	..	..	..	1	1	1	..	1	6	1	..
18. Other circulatory diseases .. ..	M.	260	..	..	..	..	..	..	..	8	41	110	101
	F.	294	..	..	..	..	..	..	..	7	40	94	153
19. Bronchitis .. ..	M.	156	9	2	1	1	..	1	3	20	52	31	36
	F.	103	6	..	1	..	1	2	3	4	13	33	40
20. Pneumonia (all forms) .. ..	M.	238	42	13	11	4	3	14	24	34	49	32	12
	F.	168	26	11	14	7	3	12	11	14	16	31	23
21. Other respiratory diseases .. ..	M.	28	..	..	1	..	..	1	4	5	7	7	3
	F.	17	2	..	..	..	..	1	1	3	4	3	3
22. Peptic Ulcer .. ..	M.	58	..	..	..	..	1	3	6	23	16	6	3
	F.	18	..	..	..	..	..	1	1	2	6	6	2
23. Diarrhœa, &c. .. ..	M.	42	36	2	..	..	..	1	1	1	1	..	..
	F.	38	24	3	..	..	..	3	3	1	1	..	3
24. Appendicitis .. ..	M.	21	..	..	1	4	2	2	2	2	5	3	..
	F.	13	..	..	..	2	3	..	1	..	6	1	..
25. Cirrhosis of Liver .. ..	M.	8	..	..	..	..	..	..	..	1	5	1	1
	F.	6	..	..	..	..	..	..	..	3	1	2	..
26. Other diseases of Liver, &c. .. ..	M.	13	..	..	..	..	1	..	..	4	1	3	4
	F.	26	..	..	1	..	..	1	1	7	2	9	5
27. Other digestive diseases .. ..	M.	48	6	..	..	..	1	1	5	11	11	7	6
	F.	59	2	..	1	..	4	2	3	7	8	19	13
28. Acute and Chronic Nephritis .. ..	M.	74	..	1	..	1	5	4	6	14	17	15	11
	F.	104	..	..	..	..	4	2	10	20	24	27	17
29. Puerperal Sepsis .. ..	F.	10	..	..	..	..	3	4	3	..	..	..	..
30. Other puerperal causes .. ..	F.	18	..	..	..	..	4	10	4	..	..	..	..
31. Congenital debility .. ..	M.	123	123	..	..	..	..	..	..	..	..	..	..
Malformation, and premature birth, etc.	F.	92	90	..	..	1	..	..	1	..	..	..	..
32. Senility .. ..	M.	32	..	..	..	..	..	..	..	..	2	9	21
	F.	57	..	..	..	..	..	..	..	..	..	12	45
33. Suicide .. ..	M.	44	..	..	..	..	..	6	6	11	11	8	2
	F.	22	..	..	..	..	..	4	3	6	7	2	..
34. Other Violence .. ..	M.	111	8	2	5	10	13	10	9	7	14	19	14
	F.	83	4	2	3	4	5	5	2	1	6	16	35
35. Other defined diseases .. ..	M.	252	20	4	3	15	17	21	13	22	52	56	29
	F.	248	25	1	5	19	9	18	24	31	46	52	18
36. Causes ill-defined or unknown .. ..	M.	1	..	..	..	..	..	..	..	..	..	1	..
	F.	1	..	..	..	..	..	..	..	..	..	..	1

## APPENDIX 4.

INFANT MORTALITY. CALENDAR YEAR 1936. NETT DEATHS FROM STATED CAUSES  
AT VARIOUS AGES UNDER 1 YEAR OF AGE.

CAUSES OF DEATH.	Under 1 day.	1-7 days.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks and under 3 months.	3 months and under 6 months.	6 months and under 9 months.	9 months and under 12 months.	Total Deaths under 1 year.
{ Small-pox .. ..	..	..	..	..	..	..	..	..	..	..	..
{ Chicken pox .. ..	..	..	..	..	..	..	..	1	..	..	1
{ Measles .. ..	..	..	..	..	..	..	..	..	7	7	14
{ Scarlet fever .. ..	..	..	..	..	..	..	..	..	..	1	1
{ Whooping Cough .. ..	..	..	..	..	..	..	..	2	5	11	18
{ Diphtheria .. ..	..	..	..	..	..	..	2	2	..	..	4
{ Influenza .. ..	..	..	..	..	..	..	..	1	..	..	1
{ Erysipelas .. ..	..	..	..	1	..	1	1	2	..	..	4
{ Tuberculous Meningitis .. ..	..	..	..	..	..	..	..	1	1	..	2
{ Abdominal Tuberculosis .. ..	..	..	..	..	..	..	..	..	..	..	..
{ Other Tuberculous Diseases .. ..	..	..	..	..	..	..	1	1	..	1	3
{ Meningitis (not Tuberculous) .. ..	..	..	..	..	..	..	..	1	..	..	1
{ Convulsions .. ..	1	4	3	..	1	9	2	1	2	1	15
{ Bronchitis .. ..	..	..	..	1	2	3	1	8	2	1	15
{ Pneumonia (all forms) .. ..	..	..	1	2	..	3	14	22	17	13	69
{ Other diseases of respiratory organs .. ..	..	..	..	..	..	..	..	2	1	..	3
{ Diarrhoea .. ..	..	..	..	4	3	7	17	23	12	6	65
{ Enteritis .. ..	..	..	..	..	..	..	..	..	..	..	..
{ Gastritis .. ..	..	..	..	..	..	..	..	..	..	..	..
{ Syphilis .. ..	..	..	..	1	..	1	3	..	1	..	5
{ Rickets .. ..	..	..	..	..	..	..	..	1	..	..	1
{ Suffocation, including overlying .. ..	5	2	..	..	..	7	4	1	..	..	12
{ Injury at birth .. ..	10	7	1	..	..	18	..	..	..	..	18
{ Atelectasis .. ..	4	2	..	..	..	6	..	..	..	..	6
{ Congenital Malformations .. ..	5	11	7	3	1	27	11	2	..	..	40
{ Premature birth .. ..	51	41	6	1	4	103	8	3	..	..	114
{ Atrophy, Debility and Marasmus .. ..	3	8	3	1	1	16	3	3	..	..	22
{ Other Causes .. ..	1	11	3	1	3	19	3	10	6	4	42
Totals .. ..	80	86	24	15	15	220	70	87	54	45	476